

**An Overview of the Chignik Management Area
Herring and Salmon Fisheries and Stock Status:**

**Report to the Alaska Board of Fisheries, November
2004**

by

Kenneth A. Bouwens

October 2004

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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Weights and measures (metric)		General		Measures (fisheries)	
centimeter	cm	Alaska Department of		fork length	FL
deciliter	dL	Fish and Game	ADF&G	mid-eye-to-fork	MEF
gram	g	Alaska Administrative		mid-eye-to-tail-fork	METF
hectare	ha	Code	AAC	standard length	SL
kilogram	kg	all commonly accepted		total length	TL
kilometer	km	abbreviations	e.g., Mr., Mrs., AM, PM, etc.		
liter	L			Mathematics, statistics	
meter	m	all commonly accepted		<i>all standard mathematical</i>	
milliliter	mL	professional titles	e.g., Dr., Ph.D., R.N., etc.	<i>signs, symbols and</i>	
millimeter	mm			<i>abbreviations</i>	
		at	@	alternate hypothesis	H _A
Weights and measures (English)		compass directions:		base of natural logarithm	<i>e</i>
cubic feet per second	ft ³ /s	east	E	catch per unit effort	CPUE
foot	ft	north	N	coefficient of variation	CV
gallon	gal	south	S	common test statistics	(F, t, χ^2 , etc.)
inch	in	west	W	confidence interval	CI
mile	mi	copyright	©	correlation coefficient	
nautical mile	nmi	corporate suffixes:		(multiple)	R
ounce	oz	Company	Co.	correlation coefficient	
pound	lb	Corporation	Corp.	(simple)	r
quart	qt	Incorporated	Inc.	covariance	cov
yard	yd	Limited	Ltd.	degree (angular)	°
		District of Columbia	D.C.	degrees of freedom	df
Time and temperature		et alii (and others)	et al.	expected value	<i>E</i>
day	d	et cetera (and so forth)	etc.	greater than	>
degrees Celsius	°C	exempli gratia		greater than or equal to	≥
degrees Fahrenheit	°F	(for example)	e.g.	harvest per unit effort	HPUE
degrees kelvin	K	Federal Information		less than	<
hour	h	Code	FIC	less than or equal to	≤
minute	min	id est (that is)	i.e.	logarithm (natural)	ln
second	s	latitude or longitude	lat. or long.	logarithm (base 10)	log
		monetary symbols		logarithm (specify base)	log ₂ , etc.
Physics and chemistry		(U.S.)	\$, ¢	minute (angular)	'
all atomic symbols		months (tables and		not significant	NS
alternating current	AC	figures): first three		null hypothesis	H ₀
ampere	A	letters	Jan,...,Dec	percent	%
calorie	cal	registered trademark	®	probability	P
direct current	DC	trademark	™	probability of a type I error	
hertz	Hz	United States		(rejection of the null	
horsepower	hp	(adjective)	U.S.	hypothesis when true)	α
hydrogen ion activity	pH	United States of		probability of a type II error	
(negative log of)		America (noun)	USA	(acceptance of the null	
parts per million	ppm	U.S.C.	United States	hypothesis when false)	β
parts per thousand	ppt, ‰	U.S. state	Code	second (angular)	"
			use two-letter	standard deviation	SD
volts	V		abbreviations	standard error	SE
watts	W		(e.g., AK, WA)	variance	
				population	Var
				sample	var

FISHERY MANAGEMENT REPORT NO. 04-09

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AND SALMON FISHERIES AND STOCK STATUS:**

REPORT TO THE ALASKA BOARD OF FISHERIES, NOVEMBER 2004

by

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ABSTRACT

This report summarizes the 2004 commercial Pacific herring *Clupea pallasii* and Pacific salmon *Oncorhynchus* sp. fisheries within the Chignik Management Area (CMA; Area L). The CMA encompasses all coastal waters and inland drainages of the northwest Gulf of Alaska between Kilokak Rocks and Kupreanof Point.

The commercial herring fisheries within the CMA have recently been either minimal or, like in 2004, non-existent. Low herring biomass coupled with low prices have precluded any commercial herring fishing interest.

All five species of Pacific salmon are commercially harvested in the CMA: Chinook *O. tshawytscha*, sockeye *O. nerka*, coho *O. kisutch*, pink *O. gorbuscha*, and chum *O. keta* salmon. As many as 101 Commercial Fisheries Entry Commission (CFEC) salmon permits have been fished annually within the last 10 years. The Chignik commercial salmon fishery is managed based on two management plans, and sockeye salmon bound for the Chignik River are allocated in two additional management plans. The Chignik Salmon Management Plan was designed to allow harvest of salmon within the CMA while achieving sufficient salmon escapement to area streams and also provides the overall framework for Chignik salmon management. The Chignik Area Cooperative Purse Seine Salmon Fishery Management Plan was designed to allow an orderly cooperative fishery within the CMA. It provides an allocation of sockeye salmon between the cooperative fleet and the CFEC permit holders who choose to continue to fish competitively. Sockeye salmon bound for the Chignik River are also harvested to the west and east of the CMA, and are allocated under the Cape Igvak and Southeastern District Mainland Management Plans.

The 2004 Chinook salmon escapement to the Chignik River was the largest on record (7,840), exceeding the escapement goal by over 5,000 salmon. The Chignik River early-run sockeye salmon escapement goal of 350,000 to 400,000 by July 5 was met with an early-run escapement of 363,800. The late run goal of 200,000 to 250,000 sockeye salmon by August 31 was essentially met with an escapement of 196,056 sockeye salmon. However, escapements were generally poor in late August through September.

A total of 87 Chignik CFEC permit holders chose to join the cooperative fleet in 2004, while 13 permit holders chose to fish independently. The majority of the fishing effort in the 2004 season was by the cooperative fleet. The entire CMA salmon fishery took place within the Chignik Bay and Central Districts. Sockeye salmon harvests on the early run (prior to July 4) were slightly higher than the average since the cooperative started, but below the recent 10- and 20-year averages. The late-run harvest, however, was well below the recent averages. The cooperative fleet harvested a total of 605,288 sockeye salmon, or 86.6 percent (allocation = 87 percent) of the CMA sockeye salmon harvest. The competitive fleet harvested a total of 93,445 sockeye salmon, or 13.4 percent (allocation = 13 percent) of the CMA sockeye salmon harvest. The harvest of other salmon species was minimal.

Key words: Chignik, salmon, sockeye salmon, Alaska Board of Fisheries, 2004 commercial fisheries management, harvest statistics, escapement statistics.

INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) manages all commercial salmon and Pacific herring *Clupea pallasii* fisheries within the Chignik Management Area (CMA; Area L). The CMA encompasses all coastal waters and inland drainages of the northwest Gulf of Alaska between Kilokak Rocks and Kupreanof Point (Figure 1). The CMA is divided into five fishing districts: Eastern, Central, Chignik Bay, Western, and Perryville Districts (Figure 2). These districts are further broken down into sections and statistical reporting areas (Figure 2). Commercial salmon fishing within the CMA is the economic mainstay for five villages: Chignik (Anchorage Bay), Chignik Lagoon, Chignik Lake, Perryville, and Ivanof Bay (Figure 1). Although shoreside-processing capacity is centered in Anchorage Bay, permit holders and crewmembers reside in all five villages. These villages historically have derived very little income from any sport fishery and sport fish harvests have been relatively low, and due to low biomass and low prices, there have been no recent commercial herring fisheries.

Five species of Pacific salmon are commercially harvested in the CMA: Chinook *Oncorhynchus tshawytscha*, sockeye *O. nerka*, coho *O. kisutch*, pink *O. gorbuscha*, and chum *O. keta* salmon.

As many as 101 Commercial Fisheries Entry Commission (CFEC) permits have been fished annually within the last 10 years. The ADF&G manages the salmon fisheries within the CMA to achieve escapement goals.

A cooperative salmon fishery was proposed by several Chignik salmon permit holders, and was adopted by the Alaska Board of Fisheries (BOF) in January 2002. Proponents of the cooperative fishery maintained that a cooperative-style fishery would reduce overhead, increase product quality, and allow commercial salmon fishermen to compete in a global market. Opponents to a cooperative fishery argued for a traditional, competitive fishery.

This report provides a summary of commercial salmon and herring fishing activity, harvests and escapements in the CMA. Historic data will be presented and compared to the 2004 season. The 2004 catch and escapement harvest numbers contained in this report are considered preliminary. The 2004 salmon harvest estimates reported in this document were summarized from the Westward Region fish ticket database September 30, 2004. Finalized data will be available in the 2004 Chignik Management Area Annual Management Report (AMR).

COMMERCIAL HERRING

HERRING MANAGEMENT OVERVIEW

Herring may be harvested in the CMA from April 15 through June 30 (sac roe season) and from August 15 through February 28 (food and bait season), although specific commercial herring fishing periods and areas are allowed only by emergency order. Herring may be taken only by purse seines not more than 1,000 meshes in depth and 100 fathoms in length.

There are several distinct areas within the CMA where the herring are managed as separate stocks (Table 1). Each individual area is managed on a maximum exploitation rate of 20%, given that a threshold biomass is available for harvest. The available biomass is determined by aerial survey, and the threshold biomass is area-specific and based on a historical accounting of herring biomass in that area.

Historical Data

Before the mid-1930s a limited commercial herring harvest occurred in conjunction with a saltery in Lake Bay. Commercial herring harvests were not recorded until 1980 (Pappas et al. 2003). Herring harvests ranged from a maximum of 587 tons in 1980 to 6 tons in 1996 in years that harvests occurred. The last commercial herring harvest in the CMA occurred in 1996 (Table 2; Pappas et al. 2003). Recently, there has been limited interest in herring fishing in the CMA due to poor market conditions and low herring biomass.

The herring biomass has not been systematically surveyed in the CMA in recent years. A survey was flown in late May of 2004 and a total of 732.5 tons of herring were observed (Table 1).

2004 Herring Fishery

There was no herring fishery in the CMA in 2004. No guideline harvest levels were set due to low biomass and lack of industry interest.

COMMERCIAL SALMON

OVERVIEW OF MANAGEMENT PLANS

The Chignik commercial salmon fishery is managed based on two management plans: the Chignik Salmon Management Plan, 5 AAC 15.357 (ADF&G 2002), and the Chignik Area Cooperative Purse Seine Salmon Fishery Management Plan, 5 AAC 15.359 (ADF&G 2002). Sockeye salmon bound for the Chignik watershed are allocated in two additional management plans: the Cape Igvak Salmon Management Plan 5 AAC 18.360 (ADF&G 2002), and the Southeastern District Mainland (SEDM) Salmon Management Plan 5 AAC 09.360; (ADF&G 2001).

Chignik Salmon Management Plan

The Chignik Salmon Management Plan (5 AAC 15.357) was originally adopted in 1999, and was amended in 2002 and 2003 (Appendix A). The goal of the plan is to allow traditional salmon fisheries in the CMA while achieving the biological escapement goals (BEGs) for both the early (Black Lake) and late (Chignik Lake) runs of sockeye salmon that spawn in the Chignik River watershed while also achieving pink, chum, and Chinook salmon escapement goals in area streams. Purse seines and hand purse seines are the only legal commercial salmon fishing gear within the CMA. Under the Chignik Salmon Management Plan, legal seine gear may be between 100-125 fathoms in length in the Chignik Bay District and 100-225 fathoms in length in all other districts. Leads may be up to 75 fathoms in length. Closed water areas applicable to this year's commercial salmon fishing season are described in the Chignik Regulatory Section of the 2002-2005 Chignik, Kodiak, and Cook Inlet Areas Commercial Fishing Regulations booklet (ADF&G 2002). The management plan is organized by district or groups of districts: the Chignik Bay and Central Districts, the Eastern District, and the Western and Perryville Districts.

Chignik Bay and Central Districts

The Chignik Bay and Central Districts are generally managed as a single unit. When there is no cooperative fishery, the first commercial fishing period in these districts can commence when:

- 1) a minimum escapement of 40,000 sockeye salmon have passed the Chignik River weir by June 12, or if a subsequent interim escapement objective (Table 3) has been met, and;
- 2) there is a strong build-up of sockeye salmon in Chignik Lagoon, as determined by the department's test fishery program.

The commercial salmon fishery is managed by emergency order to allow harvest of early-run sockeye salmon excess to interim escapement objectives from the initial fishing period to the transition period between the early and late runs. Beginning in late-June and continuing through mid-July, the department manages the fishery conservatively to ensure late-run escapement objectives are met. The Chignik Bay and Central Districts are managed based on late-run sockeye salmon interim escapement objectives and escapement objectives to local pink, chum, and coho salmon streams from July 5 through September 14. Beginning September 15, these districts may open to commercial salmon fishing for a maximum of 48 hours per week, based on the strength of the late run and the needs of subsistence users.

Eastern District

By regulation, the Eastern District opens concurrently with the Chignik Bay and Central Districts during June. The department manages the Eastern District conservatively during the transition

period to allow assessment of the Chignik sockeye salmon late run. After the transition period, the commercial fishery in the Eastern District is managed based on late-run Chignik sockeye salmon and pink, chum, and coho salmon spawning in local Eastern District streams.

Western and Perryville Districts

By regulation, the Western and Perryville Districts may open to commercial salmon fishing beginning on July 6. Until mid-July, commercial salmon fishing in these districts is to be managed conservatively to ensure Chignik late-run sockeye salmon escapement objectives are met. After the transition period until approximately August 20, commercial salmon fishing in these districts is then managed based the department's evaluation of local pink and chum salmon stocks and the strength of the late Chignik sockeye salmon run. With the exception of coho salmon caught in specified terminal harvest areas, no more than 60,000 coho salmon may be harvested in the Western and Perryville Districts from July 22 through July 31. After August 20, the Western and Perryville Districts are managed based on local coho salmon and the late Chignik sockeye salmon run.

Chignik Area Cooperative Purse Seine Salmon Fishery Management Plan

The Chignik Area Cooperative Purse Seine Salmon Fishery Management Plan, (5 AAC 15.359) was adopted in the spring of 2002, and amended in the fall of 2002 and 2003 (Appendix A2; ADF&G 2002). The purpose of this management plan is to establish the criteria and management measures for the cooperative salmon fishery in the CMA.

Conditions Required to Form a Cooperative

At least 51 Chignik Area Commercial Fisheries Entry Commission (CFEC) permit holders must apply, together, to the commissioner of ADF&G by March 1 of every year to fish as a cooperative. Other Chignik CFEC permit holders are given until March 15 of each year to join this cooperative group. Those who may elect to join the cooperative after the March 1 deadline are, by regulation, given the same terms as those who applied prior to March 1. All CFEC permit holders that elected to join the coop are only allowed to participate in the Chignik cooperative fishery, and may not participate in any other salmon fishery statewide during that season.

Allocation Criteria

In 2002, the BOF determined that an allocation between the cooperative and competitive fleets was necessary for the cooperative fishery to achieve their goals of reducing overhead expenses associated with commercial fishing and increasing product quality. These criteria were modified in 2003. Currently, the Chignik Area CFEC permit holders are allocated a percentage of the annual Chignik Area commercial sockeye salmon harvestable surplus, by fleet, based on the number of permit holders participating in the cooperative as follows:

- 1) if participation in the cooperative is less than 80 percent of the registered Chignik Area CFEC purse seine permit holders, the allocation to the annual cooperative fishery will be nine-tenths of one percent of the harvestable surplus for each participant in the cooperative,
- 2) if participation in the cooperative is 80 percent but less than 85 percent of the registered Chignik Area CFEC purse seine permit holders, the allocation to the annual cooperative fishery will be ninety-five hundredths of one percent of the harvestable surplus for each participant in the cooperative, and,

- 3) if participation in the cooperative is 85 percent or more of the registered Chignik Area CFEC purse seine permit holders, the allocation to the annual cooperative fishery will be one prorated share of the harvestable surplus for each participant in the cooperative.

Management of Allocation

The Chignik Area Cooperative Purse Seine Fishery Management Plan gives the department the charge of managing the fishery so that the two fleets (cooperative and competitive) achieve their sockeye salmon harvest allocation as closely as possible. It was noted, however, that the allocation is secondary to escapement and overall harvest objectives.

Generally, the early sockeye salmon run builds quickly. The cooperative management plan removed the escapement and lagoon build-up criteria for opening the initial fishery in the Chignik Bay and Central Districts because there was concern that the harvesting power of the smaller fleets might not be able to stop a large run. Instead, the commercial fishery is opened after June 1, in accordance with interim escapement objectives, with the goal of preventing a large escapement and build-up of salmon in the lagoon early in the season.

Another management tool that resulted from the cooperative fishery was the ability of the department to impose harvest limits. Because the cooperative fleet acts as one stakeholder, the department can impose limits on that fleet to ensure escapement needs are being met while allowing harvest of excess sockeye salmon. This tool allows low-level harvests in times that, under a traditional fishery scenario, would require the fishery to be closed.

Review of Management Plan

The BOF recognized that there was potential for contention regarding this plan, and there may be unforeseen problems when this management plan was implemented. Therefore, it was also stated in the management plan that the BOF would consider proposals regarding the Chignik Area Cooperative Purse Seine Fishery Management Plan at its first meeting in the fall of each year.

Commissioner's Permits

There were several issues that were discussed in the initial BOF meetings that were not satisfactorily resolved. The BOF directed the department to address these issues via commissioner's permits. This action gave the time and flexibility to resolve the issues to both the department's and stakeholders' satisfaction.

A commissioner's permit was written to allow the cooperative fleet to use fixed-leads in the area of Pillar Rock, which is located upstream from the traditional upper markers in Chignik Lagoon (Appendix B1; Figure 3). These leads acted to concentrate returning sockeye salmon and allowed the cooperative fleet to make fewer sets to harvest the fish that were pooled behind them. The leads also allowed the fleet to greatly increase their harvesting ability at a relatively low cost. It was possible to require the cooperative to increase harvest efficiency with the leads in times when escapements were above interim objectives. It was also a common practice for the department to require the cooperative fleet to either tie the leads up to the cork lines, or to remove the leads from the water entirely, to allow more escapement to pass into the Chignik River. This permit was amended during the 2004 season to allow the cooperative fleet to fish the leads differently than they originally planned (Appendices B2 and B3).

Another commissioner's permit was issued to allow the cooperative to record multiple deliveries in a day from one catcher vessel to one tender on one fish ticket (Appendix C1). The harvesting

and tendering practices of the cooperative precluded the efficient use of the normal fish ticket procedures because fish were not held on board the catcher vessels. Each set was either brailled directly from the catcher boat's seine onto a tender or pumped alive into a tender to increase product quality; no fish were brought on board the catcher boats. A separate fish ticket would have to be generated for every set the catcher vessel made under the requirements in regulation. The commissioner's permit had provisions regarding the estimation of the number of fish, weight, and species composition of the harvest. A further complicating factor was that the catch from several catcher boats was mixed on one tender. The processor was required to generate a true accounting of the composition of the harvest in each tender load, and assign the true number, weight, and species composition of the catch back to the individual catcher boats within three days of the actual harvest. The true numbers were generally available to the department the next morning and the differences between the catch estimates, as generated by the tenders and the processors, were minor and deemed acceptable for management purposes.

Commissioner's permits were issued to allow the cooperative fleet and the processors to hold fish alive in net pens for up to three days pending processing (Appendix C2). Holding the fish alive was a key component in the cooperative's strategy to increase product quality.

The cooperative fleet was also issued a commissioner's permit to allow the use of 225 fathom seines within certain portions of the Chignik Bay District (Appendix D1). This was also an attempt to increase the efficiency of the cooperative fleet.

Cape Igvak Salmon Management Plan

The CMA salmon fishery is also affected by the Cape Igvak Salmon Management Plan (5 AAC 18.360; ADF&G 2002; Appendix E1). This management plan was in effect before 1985, and was amended in 1985, 1988, 1996, and 2002. The Cape Igvak Section is northeast of the CMA and is the westernmost component of the Kodiak Management Area (KMA; Area K), located directly to the east of the CMA. In short, if the harvestable surplus of sockeye salmon in the CMA is above or expected to be above certain thresholds, then 15 percent of the total Chignik sockeye salmon harvest (including sockeye salmon caught at Cape Igvak and within certain portions of the Alaska Peninsula Management Area; Area M) is allocated to Cape Igvak fishermen. Based on this management plan, ninety percent of the sockeye salmon harvested within the Cape Igvak Section are considered to be Chignik-bound. This management plan is in effect from the beginning of the fishing season through July 25. After July 25, there are no allocative ties between the CMA and Area K.

Southeastern District Mainland Salmon Management Plan

Some of the sockeye salmon harvested under the Southeastern District Mainland (SEDM) Salmon Management Plan (5 AAC 09.360; ADF&G 2001; Appendix F1) are also allocatively considered Chignik-bound. This management plan was in effect before 1985, and has been amended in 1985, 1988, 1992, 1995, 1996, 1998, and 2001. The SEDM is composed of a group of sections on the eastern end of Area M, located directly southwest of the CMA. Similar to the Cape Igvak plan, if the harvestable surplus of sockeye salmon in the CMA is or will exceed certain thresholds, then 6 percent of the total Chignik sockeye salmon harvest (including sockeye salmon caught at Cape Igvak and sockeye salmon caught within certain portions of the SEDM during specific times) is allocated to SEDM fishermen. Based on this management plan, eighty percent of the sockeye salmon harvested within certain SEDM sections during specific times are considered to be Chignik-bound. This management plan is in effect from the beginning of the

fishing season through July 25. After July 25, there are no allocative ties between the CMA and Area M.

2004 SALMON MANAGEMENT

Contrary to prior years when the Chignik early and late sockeye salmon runs were separated via scale pattern analysis (SPA; Witteveen and Botz 2003; Witteveen and Botz 2004), budget cuts required the department to implement a different method for stock separation. It was determined that using a fixed date (July 4) to mark the transition between the two runs would be sufficient for management purposes. The department targeted the lower bounds of the escapement objectives and overall goals in the 2004 season (Table 3). Limnology data from 2000 to 2003 suggested that the forage base for sockeye salmon has been depressed in Chignik Lake (Bouwens and Finkle 2003a; Bouwens and Finkle 2003b; Finkle *in press*; Finkle and Bouwens 2001). The department recommended targeting the lower bound of the escapement goals in 2002 through 2004 to relieve grazing pressure on the zooplankton in Chignik Lake in hopes of improving juvenile sockeye salmon production.

A total of 87 Chignik CFEC permit holders chose to join the cooperative fleet in 2004, while 13 permit holders chose to fish independently (Table 4). This composed the largest cooperative membership to date. Eighty-seven percent of the harvestable surplus of sockeye salmon was allocated to the cooperative fleet, and 13 percent was allocated to the competitive fleet (Table 4). The first commercial fishing period began on June 4, and the last commercial fishing period ended on August 19. Commercial salmon fishing was allowed during 61 days in 2004 (Figure 4).

There were a total of four processing facilities that processed Chignik salmon in 2004: Norquest Seafoods Inc., Trident Seafoods Corp., Alaska Catch LLC, and Island Seafoods LLC. Norquest and Trident are both shore-based processors located in Anchorage Bay. Norquest was a subsidiary of Trident and these plants worked together in that all fish purchased by that group were delivered to Norquest, then some of the fish were sent to the Trident plant for final processing. Norquest generally filleted or headed and gutted (H&G) the higher-grade fish, while the lower grade and excess fish were canned at the Trident plant. Norquest operated a live fish program where fish were held in live pens until processed. Alaska Catch operated a floating processor that was anchored in Anchorage Bay. They operated a boneless fillet machine, and the majority of their fish were also processed alive. Island Seafoods, a shore-based processor located in Kodiak, bought a small amount of Chignik sockeye salmon early in the season.

The Chignik Area Salmon Management Task Force (CHASM; established in 2002) provides a mechanism for the department to discuss management options with the stakeholders without contacting the entire fleet. It is an informal group of fishermen from both fleets, the processors, and the department. A CHASM meeting was convened on June 2 in Chignik Bay, but the weather was poor and some stakeholders were unable to attend. The department discussed the run apportionment method that was going to be used in 2004, the fact that the department was going to manage for the lower end of the escapement goal ranges and the rationale for doing such, and provided an update on the ongoing smolt enumeration project. The date of the first fishing period was discussed. Processors indicated they may be interested in purchasing dark chum salmon, and that they would probably not be interested in purchasing salmon from the outside districts. There was some discussion on managing the allocation between the fleets. The minutes of this meeting are provided in Appendix G1.

An informal meeting was held at Chignik Lagoon on June 8 concerning the first competitive commercial fishing period. This meeting was held because many competitive fishermen could not attend the CHASM meeting due to poor weather. Competitive stakeholders agreed that they wanted to wait until the cooperative fleet harvested approximately 200,000 to 250,000 sockeye salmon before they went fishing. It was agreed that the department would give 48 hours notice before the first competitive fishing period, and the department would try to give 48 hours notice before any subsequent period.

Cooperative Fleet

The majority of the fishing effort in the 2004 season was by the cooperative fleet. Commercial salmon fishing began for the cooperative fleet on June 4 and ended for the season on August 19 (Figure 4), for a total of 1,285 hours over 56 days.

It was necessary to place the cooperative fleet on harvest limits on 24 separate days over the season. The limits ranged from a low of 3,000 sockeye salmon to a high of 20,000 sockeye salmon (Table 5). The cooperative fleet remained under the harvest limits reasonably well. Some days the harvest was substantially over or under the limit, but over the season the cooperative harvest was 1.7 percent less than the sum of the harvest limits (Table 5).

The cooperative fleet employed the fixed-leads for a large portion of the season (Figure 5). After July 7, the cooperative fleet did not use the lead on the Mensis Point (north bank) side of the Chignik River. Generally, the leads were attached to the shore and installed perpendicular to the flow of the stream for about half of their length. An anchor was set at the point near mid-channel, and the remainder of the net was stretched downstream parallel to the shore, and then hooked back upstream in a “J” shape. At or near high tide, a seine vessel made a “round haul” downstream of the leads to harvest the fish that had accumulated behind the leads.

The ability of the cooperative fleet to estimate daily catches and their ability to record multiple deliveries on one fish ticket allowed them to handle the fish less and increase quality. A large portion of the salmon harvested by the cooperative fleet in 2004 was delivered alive to the processors. The fish were either brailed or transferred alive with a fish pump from the seine into the tanks of a tender vessel. These tenders were equipped with oxygenation units to maintain water quality in the tanks. The fish were delivered alive to the holding pens located at the processors in Anchorage Bay. There were several instances during the season when a component of the fish perished enroute to the processors. Most of the time these fish were sold at the “dead fish” price. In some of these cases the fish spoiled and were not processed.

In the cases when salmon were to be delivered to the processor in a traditional manner, the salmon were brailed directly from the seines of the catcher boats into tenders equipped with recirculating seawater (RSW) holds. This prevented two handling steps in the delivery process; once from the seine to the hold of the catcher boat and once from the hold of the catcher boat to the hold of a tender. After processing, the actual catch numbers and weights, by species, were assigned back to the fish tickets that contributed to each tender load.

The cooperative fleet utilized 225-fathom seines within the Chignik Bay District on several occasions. The effectiveness of this gear is unknown.

Competitive Fleet

Only 13 boats were registered to fish competitively in 2004. Commercial salmon fishing began for the competitive fleet on June 18 and ended for the season on August 19 (Figure 4), for a total of 108 hours over 6 days.

The competitive fleet delivered all of their fish to one processor. No processor provided tender service in 2004, so the competitive fleet was required to either deliver to the dock or hire its own tenders. Salmon were caught and transferred into the holds of the seine vessels and then transferred to tenders in the traditional manner. The competitive fleet did not deliver any live fish to the processor.

Chignik Bay and Central Districts Commercial Salmon Fishery

The entire 2004 CMA commercial salmon fishery took place within these districts. More specifically, all commercial salmon harvest took place within the statistical area that encompasses Chignik Lagoon (Figure 2) except one delivery. Therefore, the majority of the management of the Chignik salmon fishery will be described under this section.

The commercial salmon fishery began on June 4. The Chignik Lagoon markers were placed at Humes Point for the first 24 hours of this fishing period, after which they were moved to Pillar Rock. Generally, the Humes Point markers were used for the first 24 hours of a commercial fishing period after an extended closure to commercial salmon fishing to allow the salmon above these markers to escape the fishery. Sockeye salmon occasionally spent a considerable amount of time in Chignik Lagoon, which degraded the quality of the fish caught in the upper lagoon. Using the Humes Point markers allowed these older fish to escape the fishery. The Humes Point markers were also used on several occasions to increase escapement, especially when it was suspected that fish were holding in the lagoon. This also allowed the department to assess the magnitude of 'new fish' entering the lagoon by concentrating the effort in the lower lagoon.

The Chignik Bay and Central Districts were open to commercial salmon fishing through June 23. The cooperative fleet fished for the majority of this period, although there was one 24-hour commercial fishing period for the competitive fleet beginning June 18 and ending June 19. The Chignik Lagoon markers were placed at Mensis Point (Figure 3) for this period. On a few occasions the cooperative fleet, at the department's request, did shift their effort below the Humes Point markers (Figure 3) or they lifted the lead lines of one or both leads to increase escapement. However, in general the commercial fishing effort matched the magnitude of the run, and additional management actions were not required until June 16 when a relatively generous harvest limit (15,000) was imposed on the cooperative fleet. Limits were again imposed on June 21 and 22, after which the commercial salmon fishery was closed beginning June 23 (Table 5).

The commercial salmon fishery again reopened for the competitive fleet for 24 hours on June 25 and June 26. The Chignik Lagoon markers were at Humes Point for this period. The markers were moved to Pillar Rock and the commercial fishery reopened for the cooperative fleet on June 26 through July 4. The lagoon markers were briefly moved to Humes Point on June 29 and June 30, after which the markers were moved back to Pillar Rock, reducing the closed waters. Harvest limits were imposed on June 27 and 30, and again on July 1. The Chignik Lagoon markers were moved to Mensis Point and the commercial fishery was opened for the competitive fleet for 24 hours beginning July 11:59 PM on July 4 (Figures 3 and 4).

Commercial salmon fishing reopened for the cooperative fleet on July 6 and remained open through July 15. Harvest limits were imposed for most of this period (Table 5). The Chignik Lagoon markers were moved to Mensis Point and commercial salmon fishing was again opened for the competitive fleet for 24 hours on July 16 and 17. This was the last competitive commercial salmon fishing period in the Chignik Bay and Central Districts (Figures 3 and 4).

Commercial salmon fishing continued for the cooperative fleet on July 19 through July 24. The lagoon markers were at Humes Point for the first 24 hours, after which they were moved to Pillar Rock. Harvest limits were imposed every day during this period (Table 5; Figures 3 and 4).

The fishery was closed to obtain escapement until July 27, when it was reopened to the cooperative fleet. Like earlier in the season after a closure, the markers were set at Humes Point and then moved to Pillar Rock after 24 hours. Harvest limits were in effect for this entire period. The commercial fishery again closed on July 29. Commercial fishing began again for the cooperative fleet on July 31. The number of sockeye salmon entering the lagoon during late-July and early-August was low. The cooperative fleet reduced their effort to match escapement requirements and to reduce their costs. The fishery was managed conservatively by restricting the fishing time to 24-hour extensions; fishing time for the next day was not announced until escapement thresholds were met. This commercial fishing period ended on August 2, after escapements fell below these thresholds. When escapement levels increased, the fishery was again opened for the cooperative fleet on August 5 and remained open until August 8. With the exception of August 2, harvest limits were not necessary in August; the cooperative fleet reduced their effort because of the overall low abundance of salmon in the lagoon. There were no more commercial salmon fishing periods in the Chignik Bay and Central Districts in 2004 (Table 5; Figures 3 and 4).

Eastern District Commercial Salmon Fishery

The Eastern District, by regulation, opened concurrently with the Chignik Bay and Central Districts in June. The Eastern District was also opened concurrently with the Chignik Bay and Central Districts through the end of July. There was no commercial salmon fishing effort in the Eastern District in 2004.

There was some interest by local processors to open the Eastern District to target dark chum salmon. On two occasions (approximately July 31 and August 10), a harvestable surplus of chum salmon was observed in two separate bays. However, the processors were not interested in purchasing dark chum salmon on either of these occasions. Therefore, a fishery was not prosecuted on these salmon.

Western and Perryville Districts Commercial Salmon Fishery

The Western and Perryville Districts are closed to commercial salmon fishing by regulation in June. Beginning approximately July 6, these districts can be opened on a commercial test fishery basis targeting migrating pink and chum salmon. Once these fish begin entering local streams, management of these stocks shifts to an escapement-based strategy. On July 23 the department was notified that a buyer from outside the CMA was interested in purchasing bright pink and chum salmon. CHASM members from both fleets were notified of this potential commercial test fishery and they were reminded that all sockeye salmon caught in this fishery would count toward their allocation. Both fleets chose not to participate in this fishery and the Western and Perryville Districts were not opened.

On August 17 aerial survey information indicated a harvestable surplus of dark chum salmon within Ivanof Bay (Figure 2). A local processor indicated they were interested in purchasing these salmon and a commercial salmon fishery was announced for both fleets within Ivanof Bay for 12 hours on August 19. However, there was no participation in this fishery.

CHIGNIK, IGVAK, AND SEDM FISHERY DATA

Escapement Information

Salmon escapement to the Chignik River is measured through the use of a weir. There are two gates in the weir, which are generally always open. Underwater video equipment is utilized to count the fish through the weir. Video recordings of the escapement are kept 24 hours a day and archived. The number of fish passing the weir, by species, are counted for the first 10 minutes of each hour, and these counts are multiplied by six to obtain the hourly counts. These hourly counts are summed to provide an estimate of daily fish passage. The first count of the 2004 season was on May 30, and the last count of the season was on September 4. The majority of the Chinook, sockeye, pink, and chum salmon escapements were counted through the weir. A post-weir sockeye salmon escapement estimate was produced for the September 5-15 and the September 16-30 periods. The coho salmon run is generally still building when the weir is removed, and therefore the coho salmon counts are considered incomplete and it was not possible to estimate the post-weir coho salmon escapement.

Escapements to other CMA streams were estimated via aerial survey. Surveys were flown at regular intervals, and total escapement was estimated using the methods of Johnson and Barrett (1988).

Chinook Salmon

The Chinook salmon run began entering the Chignik River in mid-June, peaked in mid-July, and was over by late-August (Table 6; Figure 6). The 2004 Chignik River Chinook salmon escapement was the largest on record (Table 7; Figure 7) significantly exceeding the Chignik River Chinook escapement goal of 1,300 to 2,700 (Hasbrouck and Clark *in press*). The Chignik River is the only stream with substantial Chinook salmon production within the CMA.

Sockeye Salmon

The early-run escapement goal of 350,000 to 400,000 sockeye salmon through July 4 was achieved with an estimated escapement of 363,800. The late-run (July 5 through August 31) escapement goal of 200,000 to 250,000 sockeye salmon was essentially met with an estimated escapement of 196,056 (Tables 8 and 9; Figures 8 through 10; Nelson and Lloyd 2001).

Chignik River sockeye salmon are managed based on interim escapement objectives to achieve the overall escapement goals, by run (Table 3; Nelson and Lloyd 2001). The interim objectives are summarized by time periods that generally are a month in duration. These interim objectives were generally met, although escapements fell slightly below interim objectives in late August (Table 3; Figure 9). Subsequent escapement objectives totaling 25,000 sockeye salmon from September 1 through 15 are in addition to the late-run escapement goal; the escapement estimate for this period was 13,800 sockeye salmon (Table 8).

Sockeye salmon escapements into other CMA streams were relatively minor. These escapements were monitored via aerial survey, and were entered into the Westward Region Stream Survey Database.

Coho Salmon

Coho salmon begin to enter CMA drainages in mid-August and continue through November. Therefore, coho salmon escapement estimates are incomplete because department staff closes the Chignik office in mid-September. Therefore, there are no coho salmon escapement goals established for the CMA (Nelson and Lloyd 2001). The 2004 Chignik River coho salmon escapement estimate through September 4 was 18,810 (Table 6). Coho salmon escapements to other CMA streams were monitored via aerial survey, and were documented in the Westward Region Stream Survey Database.

Pink Salmon

Pink salmon are counted through the Chignik River weir. Chignik River pink salmon escapement data are available back to 1996 in the department's databases. The 2004 Chignik River pink salmon escapement was 2,243 salmon (Table 7).

Pink salmon escapement to other CMA streams are estimated via aerial survey and summarized by district (Table 10). The current pink salmon escapement goals, by district are: Chignik Bay (6,500); Central (119,500); Eastern (488,000); Western (61,500) and Perryville (104,000) for a combined goal of 779,500 pink salmon. All of these district goals were exceeded in 2004 (Table 10).

Chum Salmon

Chum salmon are also counted through the Chignik River weir. Chignik River chum salmon escapement data are readily available back to 1996 in the department's databases (Table 7). The 2004 Chignik River chum salmon escapement was 276 salmon (Table 7).

Chum salmon escapement to other CMA streams are estimated via aerial survey and are summarized by district (Table 11). The current chum salmon escapement goals, by district are: Chignik Bay (2,000); Central (39,500); Eastern (93,700); Western (12,500) and Perryville (59,000) for a combined goal of 206,700 chum salmon. The Eastern District threshold was met, but the chum salmon escapements to the other districts were not met; however, the overall CMA chum salmon escapement exceeded the combined district-wide goals (Table 11).

Harvest Information

The harvest data associated with Chignik can be somewhat confusing because there are several categories of commercial harvests for each species. Home pack fish are salmon caught during commercial fishing activities and are not sold but retained for personal consumption; these salmon are categorized as "personal use" on ADF&G fish tickets. The department also harvests and sells salmon as part of a test fishery program. The SEDM and Cape Igvak management plans specify that specific portions of the sockeye salmon commercially harvested under those management plans are bound for the CMA. All of these categories are considered commercially caught salmon. Subsistence salmon harvests are not reported here and are not included in any of the allocations. Home pack fish are included in the within-CMA allocation scheme, but are not included in the SEDM and Cape Igvak allocations. The test fishery harvests are also not considered part of the allocation.

Almost all of the salmon harvested in 2004 within the CMA were caught within the Chignik Bay District. Therefore, harvest data are not presented by district but are reported as the total CMA harvest.

The total 2004 CMA harvest, including home pack and the department's test fisheries harvests, (but not the Cape Igvak and SEDM harvests), are listed in Table 12. The 2004 CMA harvest of all species was less than the 2002-2003 average (the cooperative management plan years), and the prior 10- and 20-year averages (Table 12; Figures 11 and 12). The majority of the 2004 CMA salmon harvest took place in June and July (Tables 13 and 14). The Chinook salmon harvest was approximately equal to the harvest of the prior two years under the cooperative management plan, and about half of the prior 10- and 20- year averages (Table 13). The early run sockeye salmon harvest (before July 5) was similar to prior year's average early run harvest, but the late run harvest was well below the recent averages (Table 9; Figure 11). The 2004 coho salmon harvest was exceptionally weak because there was no commercial salmon fishing effort in mid- to late-August (Tables 12 and 13). The pink and chum salmon harvests were also well below recent averages, likely because of the lack of commercial fishing effort outside of Chignik Lagoon where the majority of the pink and chum salmon have historically been caught (Table 13).

The cooperative fleet was allocated 87 percent and the competitive fleet was allocated 13 percent of the within-CMA sockeye salmon harvest. The cooperative fleet harvested a total (including home pack) of 605,288 sockeye salmon, or 86.6 percent of the CMA sockeye salmon harvest. The competitive fleet harvested a total (including home pack) of 93,445 sockeye salmon, or 13.4 percent of the CMA sockeye salmon harvest (Table 16). The cooperative fleet was under their allocation by approximately 2,600 sockeye salmon.

The 2004 Cape Igvak and SEDM harvests are listed in Table 14. These data are compared to prior years in Tables 15 and 17. These fisheries are managed on inseason sockeye salmon catch and escapement numbers in June and July, and they primarily target the early run. Therefore, the harvests in these areas were not as greatly impacted by the weak late run at Chignik as the CMA harvests. The 2004 Cape Igvak harvest was above the 2002-2003 average harvest, but well below the recent 10- and 20-year averages (Table 17). Area K fishermen caught approximately 17.9 percent of the Chignik sockeye salmon harvest at Cape Igvak, which was about 3 percent, or about 31,000 sockeye salmon, above the allocation of 15.0 percent (Table 17). The 2004 SEDM harvest was slightly below the 2002-2003 average harvest, and well below the recent 10- and 20-year averages (Tables 15 and 17). Alaska Peninsula Management Area fishermen harvested about 6.2 percent of the Chignik sockeye salmon harvest in the SEDM fishery, which was about 1,000 sockeye salmon over their allocation of 6.0 percent (Table 17).

The economic value of the 2004 CMA salmon harvest was about \$3.6 million (\$36 thousand per permit holder), which was the lowest value since 1975 (Table 18). The vast majority of the value was from the sale of sockeye salmon, with Chinook salmon being the second most valuable species (Table 18). On average, coho, pink, and chum salmon provided less than \$10 each for each individual permit holder (Table 18).

DEPARTMENT TEST FISHERIES

The department conducted test fisheries on two occasions in 2004 and this information was used to plan subsequent commercial fishing activity and to generate revenue to support the management of the Chignik commercial salmon fishery. The first test fishery took place on June 23, when 3,069 sockeye salmon and 4 Chinook salmon were harvested (Table 14). This fishery took place after the commercial fishery was closed for a short period to obtain sockeye salmon escapement in the Chignik River. Results of this test fishery indicated that substantial numbers of

sockeye salmon were not holding in Chignik Lagoon. Another test fishery took place on June 27. A total of 2,850 sockeye salmon were harvested in the second fishery (Table 14).

SUBSISTENCE SALMON FISHERIES

In 2004, department provided additional subsistence opportunity within the CMA. The Chignik River is closed to subsistence salmon fishing by regulation (5 AAC 01.475. Waters Closed to Subsistence Fishing). However, the department allowed, through emergency order, subsistence users to fish for salmon within the Chignik River excluding the area 100 yards upstream and downstream of the Chignik weir through June 30. This was to provide additional harvest opportunity on sockeye salmon while protecting spawning Chinook salmon.

5 AAC 01.485, Restrictions on Commercial Fishermen, states that a commercial fishing license holder may not subsistence fish for salmon from 48 hours before the first commercial salmon fishing period through September 30 in the CMA. This regulation was relaxed via provisions of the subsistence fishing permit to allow fishermen to harvest subsistence fish during the commercial fishing season (Appendix H).

The department was made aware by several users that they had difficulty obtaining their subsistence salmon in 2004. Specifically, it was brought to the department's attention that salmon caught in early June are especially important to subsistence users because these fish are traditionally smoked and it is necessary to cure these fish before the flies hatch, which typically occurs in mid- to late-June.

There have also been ongoing discussions about the difficulty of obtaining subsistence fish very late in the season from Chignik Lake. In 2002 and 2004 the United States Fish and Wildlife Service (USFWS) implanted radio transmitters in sockeye salmon passing the Chignik weir in August and early-September to determine when sockeye salmon harvested in this late season subsistence fishery passed the Chignik weir. The results of the 2002 studies are described in Anderson (2003).

2005 HARVEST PROJECTIONS

The 2005 harvest projections are not available. In past years, Chinook, coho, pink and chum harvest projections have been based on average harvests. These species have been harvested only incidentally to sockeye salmon since the inception of the cooperative fishery. It is expected that the harvest of these species will continue to be minimal.

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TABLES AND FIGURES

Table 1.—Chignik Management Area herring biomass, by area, 2004.

Section	Stat. Area(s)	2004 Biomass (tons) ^a
Chignik Lagoon and Bay	271-10 to 272-40	140.0
Kujulik	272-50	0.0
Big River	272-60 to 272-70	0.0
Cape Kumlik	272-62 to 272-64	0.0
Yantarni	272-72 to 272-80	0.0
Chiginagak	272-90	0.0
Agripina	272-92 to 272-96	0.0
Mitrofanina	273-70 to 273-74	12.5
Dorner Bay	273-82 to 273-84	0.0
Castle Cape	273-90 to 273-94	55.0
Perryville	275-60	0.0
Humpback Bay	275-50	132.5
Ivanof Bay	275-40	392.5
Total CMA		732.5

Table 2.—Commercial herring harvest in the Chignik Management Area, by year, 1980 to 2004.

Year	Harvest (tons)
1980	587
1981	441
1982	190
1983	88
1984	66
1985	0
1986	11
1987	75
1988	59
1989	66
1990	0
1991	0
1992	0
1993	0
1994	0
1995	77
1996	6
1997	0
1998	0
1999	0
2000	0
2001	0
2002	0
2003	0
2004	0

Table 3.—Sockeye salmon interim escapement objectives for the Chignik River, 2004.

Date	Escapement		Date	Escapement	
	Lower	Upper		Lower	Upper
June 2	500	- 1,000	August 3	3,000	- 5,000
June 4	2,000	- 3,000	August 6	5,000	- 10,000
June 6	5,000	- 7,000	August 9	10,000	- 15,000
June 8	10,000	- 14,000	August 12	15,000	- 20,000
June 10	20,000	- 25,000	August 15	20,000	- 25,000
June 12	30,000	- 40,000	August 18	25,000	- 30,000
June 14	50,000	- 70,000	August 21	30,000	- 35,000
June 16	75,000	- 110,000	August 24	36,000	- 40,000
June 18	125,000	- 160,000	August 27	43,000	- 45,000
June 20	175,000	- 220,000	August 31	50,000	- 50,000
June 22	225,000	- 275,000			
June 25	275,000	- 325,000	September 3	3,000	- 4,000
June 28	300,000	- 350,000	September 5	6,000	- 8,000
July 1	325,000	- 375,000	September 7	10,000	- 12,000
July 4	350,000	- 400,000 ^a	September 9	14,000	- 16,000
			September 11	18,000	- 20,000
July 6	5,000	- 10,000	September 13	22,000	- 23,000
July 8	15,000	- 20,000	September 15	25,000	- 25,000
July 10	30,000	- 40,000			
July 12	45,000	- 60,000			
July 14	56,000	- 75,000	Goal through July 4:	350,000	- 400,000
July 16	67,000	- 90,000			
July 19	86,000	- 115,000	July 5 through Aug.		
July 21	101,000	- 135,000	31 Goal:	200,000	- 250,000
July 23	120,000	- 160,000			
July 26	135,000	- 180,000	Sept. 1 through Sept.		
July 29	146,000	- 195,000	15 Objective:	25,000	
July 31	150,000	- 200,000			

^a Through July 4 is historically the date on which the inseason escapement most closely approximated the early-run escapement as estimated by post-season scale pattern analysis.

Table 4.—Fleet membership and allocations, 2002 through 2004.

Year	Number of CFEC permit holders			Allocation (Percent)	
	Cooperative	Competitive	Total	Cooperative	Competitive
2002	77	22	99	69.3	30.7
2003	77	24	101	69.3	30.7
2004	87	13	100	87.0	13.0

Table 5.—Cooperative sockeye salmon harvest limits, actual catch, difference, and percent difference, by day, 2004.

Day	Limit	Actual Catch	Difference	% Difference
6/16	15,000	14,111	-889	-5.9
6/20	10,000	17,599	7,599	76.0
6/21	10,000	10,004	4	0.0
6/27	20,000	24,342	4,342	21.7
6/30	10,000	4,989	-5,011	-50.1
7/1	10,000	9,693	-307	-3.1
7/8	10,000	9,032	-968	-9.7
7/9	10,000	8,837	-1,163	-11.6
7/10	15,000	15,089	89	0.6
7/11	15,000	13,645	-1,355	-9.0
7/12	5,000	4,373	-627	-12.5
7/13	5,000	6,583	1,583	31.7
7/14	3,000	2,781	-219	-7.3
7/15	3,000	3,110	110	3.7
7/19	5,000	2,439	-2,561	-51.2
7/20	5,000	7,111	2,111	42.2
7/21	5,000	5,034	34	0.7
7/22	5,000	4,123	-877	-17.5
7/23	3,000	3,123	123	4.1
7/24	3,000	3,010	10	0.3
7/27	3,000	0	-3,000	-100.0
7/28	5,000	4,328	-672	-13.4
7/29	3,000	2,800	-200	-6.7
8/2	3,000	1,737	-1,263	-42.1
Total	181,000	177,893	-3,107	-1.7

Table 6.—Estimated Chinook, coho, pink, and chum salmon escapement to the Chignik River, by day, 2004.

Date	Chinook		Coho		Pink		Chum	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
5/30 ^a	0	0	0	0	0	0	0	0
5/31	0	0	0	0	0	0	0	0
6/1	0	0	0	0	0	0	0	0
6/2	0	0	0	0	0	0	0	0
6/3	0	0	0	0	0	0	0	0
6/4	0	0	0	0	0	0	0	0
6/5	0	0	0	0	0	0	0	0
6/6	0	0	0	0	0	0	0	0
6/7	0	0	0	0	0	0	0	0
6/8	0	0	0	0	0	0	0	0
6/9	0	0	0	0	0	0	0	0
6/10	0	0	0	0	0	0	0	0
6/11	0	0	0	0	0	0	0	0
6/12	0	0	0	0	0	0	0	0
6/13	0	0	0	0	0	0	0	0
6/14	0	0	0	0	0	0	0	0
6/15	0	0	0	0	0	0	0	0
6/16	0	0	0	0	0	0	0	0
6/17	6	6	0	0	0	0	6	6
6/18	12	18	0	0	0	0	0	6
6/19	0	18	0	0	0	0	0	6
6/20	6	24	0	0	0	0	0	6
6/21	24	48	0	0	0	0	0	6
6/22	0	48	0	0	0	0	0	6
6/23	18	66	0	0	0	0	0	6
6/24	48	114	0	0	0	0	0	6
6/25	96	210	0	0	0	0	0	6
6/26	102	312	0	0	0	0	0	6
6/27	36	348	0	0	0	0	0	6
6/28	138	486	0	0	0	0	0	6
6/29	168	654	0	0	0	0	0	6
6/30	126	780	0	0	0	0	0	6
7/1	146	926	0	0	0	0	0	6
7/2	138	1,064	0	0	0	0	0	6
7/3	90	1,154	0	0	0	0	0	6
7/4	141	1,295	0	0	0	0	6	12
7/5	331	1,626	0	0	0	0	0	12
7/6	156	1,782	0	0	0	0	0	12
7/7	91	1,873	0	0	6	6	0	12
7/8	199	2,072	0	0	0	6	6	18
7/9	181	2,253	0	0	0	6	0	18
7/10	145	2,398	0	0	0	6	0	18
7/11	300	2,698	0	0	0	6	0	18
7/12	246	2,944	0	0	0	6	0	18

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Table 6.– Page 2 of 3.

Date	Chinook		Coho		Pink		Chum	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
7/13	379	3,323	0	0	0	6	0	18
7/14	409	3,732	0	0	0	6	0	18
7/15	288	4,020	0	0	0	6	0	18
7/16	223	4,243	0	0	0	6	0	18
7/17	309	4,552	0	0	6	12	1	19
7/18	433	4,985	0	0	0	12	24	43
7/19	271	5,256	0	0	0	12	6	49
7/20	222	5,478	0	0	0	12	18	67
7/21	243	5,721	0	0	12	24	9	76
7/22	122	5,843	0	0	0	24	6	82
7/23	185	6,028	0	0	0	24	6	88
7/24	103	6,131	0	0	0	24	6	94
7/25	180	6,311	0	0	0	24	0	94
7/26	177	6,488	0	0	72	96	12	106
7/27	144	6,632	0	0	12	108	12	118
7/28	96	6,728	0	0	66	174	0	118
7/29	96	6,824	0	0	24	198	6	124
7/30	132	6,956	0	0	42	240	24	148
7/31	120	7,076	0	0	18	258	0	148
8/1	24	7,100	6	6	60	318	54	202
8/2	73	7,173	0	6	78	396	12	214
8/3	79	7,252	6	12	12	408	6	220
8/4	72	7,324	6	18	83	491	0	220
8/5	48	7,372	0	18	96	587	0	220
8/6	18	7,390	6	24	108	695	18	238
8/7	37	7,427	0	24	78	773	12	250
8/8	18	7,445	0	24	60	833	0	250
8/9	1	7,446	0	24	30	863	0	250
8/10	11	7,457	0	24	1	864	0	250
8/11	32	7,489	0	24	395	1,259	6	256
8/12	42	7,531	1	25	192	1,451	0	256
8/13	48	7,579	0	25	144	1,595	6	262
8/14	48	7,627	0	25	253	1,848	7	269
8/15	30	7,657	12	37	108	1,956	0	269
8/16	18	7,675	12	49	121	2,077	1	270
8/17	6	7,681	0	49	24	2,101	0	270
8/18	3	7,684	3	52	1	2,102	2	272
8/19	5	7,689	2	54	0	2,102	0	272
8/20	59	7,748	3	57	45	2,147	0	272
8/21	18	7,766	3	60	30	2,177	0	272
8/22	72	7,838	18	78	36	2,213	0	272
8/23	1	7,839	3	81	6	2,219	0	272
8/24	1	7,840	484	565	0	2,219	0	272
8/25	0	7,840	1,324	1,889	24	2,243	0	272
8/26	0	7,840	635	2,524	0	2,243	0	272
8/27	0	7,840	965	3,489	0	2,243	0	272

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Table 6.– Page 3 of 3.

Date	Chinook		Coho		Pink		Chum	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
8/28	0	7,840	873	4,362	0	2,243	1	273
8/29	0	7,840	1,491	5,853	0	2,243	2	275
8/30	0	7,840	1,224	7,077	0	2,243	0	275
8/31	0	7,840	1,429	8,506	0	2,243	0	275
9/1	0	7,840	1,133	9,639	0	2,243	0	275
9/2	0	7,840	1,721	11,360	0	2,243	1	276
9/3	0	7,840	3,084	14,444	0	2,243	0	276
9/4 ^b	0	7,840	4,366	18,810	0	2,243	0	276
Totals	7,840		18,810		2,243		276	

^a Weir installed May 30.

^b Weir removed September 5.

Table 7.—Estimated Chinook, pink, and chum salmon escapement to the Chignik River, 1970 to 2004.

Year	Escapement		
	Chinook ^a	Pink ^b	Chum ^b
1970	2,500	N/A	N/A
1971	2,000	N/A	N/A
1972	1,500	N/A	N/A
1973	822	N/A	N/A
1974	672	N/A	N/A
1975	877	N/A	N/A
1976	700	N/A	N/A
1977	798	N/A	N/A
1978	1,197	N/A	N/A
1979	1,050	N/A	N/A
1980	876	N/A	N/A
1981	1,603	N/A	N/A
1982	2,412	N/A	N/A
1983	1,943	N/A	N/A
1984	5,806	N/A	N/A
1985	3,144	N/A	N/A
1986	3,612	N/A	N/A
1987	2,624	N/A	N/A
1988	4,868	N/A	N/A
1989	3,316	N/A	N/A
1990	4,364	N/A	N/A
1991	4,531	N/A	N/A
1992	3,806	N/A	N/A
1993	1,946	N/A	N/A
1994	2,963	N/A	N/A
1995	4,288	N/A	N/A
1996	3,488	6,030	136
1997	3,824	4,880	483
1998	3,075	11,490	156
1999	3,728	2,524	48
2000	4,285	4,284	48
2001	3,028	1,464	66
2002	3,541	3,417	67
2003	6,412	1,897	68
2004	7,840	2,243	276
Averages			
1982-01	3,553		
1992-01	3,443	5,112	156
2002-03	4,977	2,657	68

^a No escapement adjustments are made for chinook salmon that spawn below the weir, or those removed by the sport fishery. Only large fish enumerated for escapement estimates from 1970 to 1996.

^b No reliable escapement estimates were generated for pink and chum salmon from 1970 to 1996 when a video monitoring system was installed at the Chignik weir.

Table 8.—Estimated Chignik River sockeye salmon escapement, by day and management objective period, 2004.

Early Run			Late Run								
Through July 4			July 5-July 31			August			September 1-15		
Date	Daily	Total	Date	Daily	Total	Date	Daily	Total	Date	Daily	Total
5/30	798	798	7/5	5,939	5,939	8/1	1,959	1,959	9/1	1,253	1,253
5/31	1,751	2,549	7/6	3,471	9,410	8/2	1,307	3,266	9/2	1,604	2,857
6/1	1,156	3,705	7/7	1,867	11,277	8/3	1,417	4,683	9/3	1,203	4,060
6/2	1,242	4,947	7/8	5,602	16,879	8/4	2,658	7,341	9/4	1,274	5,334
6/3	1,631	6,578	7/9	8,893	25,772	8/5	2,169	9,510	9/5-9/15 estimate	8,466	13,800
6/4	4,694	11,272	7/10	6,974	32,746	8/6	1,934	11,444	9/16-9/30 estimate	4,603	18,403
6/5	8,945	20,217	7/11	4,735	37,481	8/7	1,251	12,695			
6/6	3,621	23,838	7/12	2,970	40,451	8/8	705	13,400			
6/7	4,224	28,062	7/13	4,121	44,572	8/9	512	13,912			
6/8	4,678	32,740	7/14	8,223	52,795	8/10	248	14,160	7/5 through 9/15 total:		209,856
6/9	4,078	36,818	7/15	12,569	65,364	8/11	3,956	18,116			
6/10	6,574	43,392	7/16	6,983	72,347	8/12	2,127	20,243	7/5 through 9/30 total:		214,459
6/11	4,806	48,198	7/17	6,796	79,143	8/13	1,638	21,881			
6/12	7,421	55,619	7/18	4,788	83,931	8/14	1,757	23,638			
6/13	4,541	60,160	7/19	7,837	91,768	8/15	2,034	25,672	Season total through 9/15:		573,656
6/14	2,972	63,132	7/20	6,604	98,372	8/16	1,415	27,087			
6/15	2,657	65,789	7/21	5,063	103,435	8/17	618	27,705			
6/16	14,035	79,824	7/22	5,901	109,336	8/18	203	27,908	Season total through 9/30:		578,259
6/17	19,828	99,652	7/23	4,547	113,883	8/19	477	28,385			
6/18	18,416	118,068	7/24	5,544	119,427	8/20	1,683	30,068			
6/19	23,056	141,124	7/25	7,920	127,347	8/21	1,800	31,868			
6/20	10,813	151,937	7/26	7,338	134,685	8/22	901	32,769			
6/21	13,939	165,876	7/27	5,511	140,196	8/23	383	33,152			
6/22	24,059	189,935	7/28	3,514	143,710	8/24	739	33,891			
6/23	34,723	224,658	7/29	3,055	146,765	8/25	1,401	35,292			
6/24	24,071	248,729	7/30	4,278	151,043	8/26	656	35,948			
6/25	35,283	284,012	7/31	3,224	154,267	8/27	647	36,595			
6/26	11,292	295,304	July 5-31 total:		154,267	8/28	920	37,515			
6/27	3,229	298,533				8/29	1,432	38,947			
6/28	3,705	302,238	Late run total through			8/30	1,685	40,632			
6/29	7,208	309,446	7/31 :		154,267	8/31	1,157	41,789			
6/30	11,415	320,861	Season total through			August total:		41,789			
7/1	15,412	336,273	7/31:		518,067						
7/2	17,734	354,007				Late run total through					
7/3	6,959	360,966				8/31 :		196,056			
7/4	2,834	363,800				Season total through					
Early run total:		363,800				8/31:		559,856			

Table 9.— Total sockeye salmon escapement, total catch, and total run, by run and year, 1960 to 2004.

Year	Early Run			Late Run			Total Run ^{abc}		
	Esc.	Catch	Run	Esc.	Catch	Run	Esc.	Catch	Run
1960	251,567	274,048	525,615	357,230	418,356	775,586	608,797	692,404	1,301,201
1961	140,714	53,852	194,566	254,970	278,609	533,579	395,684	332,461	728,145
1962	167,602	71,562	239,164	324,860	292,528	617,388	492,462	364,090	856,552
1963	332,536	80,258	412,794	200,314	323,080	523,394	532,850	403,338	936,188
1964	137,073	142,380	279,453	166,625	472,510	639,135	303,698	614,890	918,588
1965	307,192	497,018	804,210	163,151	169,576	332,727	470,343	666,594	1,136,937
1966	383,545	87,169	470,714	183,525	162,638	346,163	567,070	249,807	816,877
1967	328,000	154,134	482,134	189,000	350,901	539,901	517,000	505,035	1,022,035
1968	342,343	542,598	884,941	244,836	641,693	886,529	587,179	1,184,291	1,771,470
1969	366,589	263,170	629,759	132,055	235,960	368,015	498,644	499,130	997,774
1970	536,257	1,566,065	2,102,322	119,952	262,244	382,196	656,209	1,828,309	2,484,518
1971	671,668	555,832	1,227,500	232,501	709,190	941,691	904,169	1,265,022	2,169,191
1972	326,320	43,220	369,540	231,270	386,615	617,885	557,590	429,835	987,425
1973	^d 538,462	610,488	1,148,950	243,729	355,195	598,924	782,191	965,683	1,747,874
1974	364,603	204,722	569,325	313,343	648,283	961,626	677,946	853,005	1,530,951
1975	319,890	7,873	327,763	257,508	417,560	675,068	577,398	425,433	1,002,831
1976	548,953	599,341	1,148,293	281,810	727,043	1,008,854	830,763	1,326,384	2,157,147
1977	364,557	534,198	898,755	328,916	1,602,363	1,931,278	693,473	2,136,561	2,830,034
1978	419,732	940,188	1,359,919	262,815	885,173	1,147,988	682,547	1,825,361	2,507,908
1979	491,467	186,537	678,004	246,349	933,788	1,180,137	737,816	1,120,325	1,858,141
1980	369,580	73,742	443,322	294,481	849,980	1,144,461	664,061	923,722	1,587,783
1981	570,210	800,364	1,370,573	261,239	1,444,365	1,705,605	831,449	2,244,729	3,076,178
1982	616,117	1,325,041	1,941,158	305,193	451,789	756,982	921,310	1,776,830	2,698,140
1983	426,178	1,128,246	1,554,423	428,034	1,241,369	1,669,404	854,212	2,369,615	3,223,827
1984	597,713	2,919,984	3,517,697	267,861	613,075	880,936	865,574	3,533,059	4,398,633
1985	373,040	654,756	1,027,796	372,798	442,443	815,241	745,838	1,097,199	1,843,037
1986	557,772	1,364,295	1,922,067	215,547	587,561	803,108	773,319	1,951,856	2,725,175
1987	589,299	1,946,938	2,536,237	214,444	419,992	634,436	803,743	2,366,931	3,170,674
1988	420,580	272,074	692,654	255,177	554,304	809,481	675,757	826,379	1,502,136
1989	384,001	234,237	618,238	557,174	929,535	1,486,709	941,175	1,163,772	2,104,947
1990	434,550	582,520	1,017,070	335,860	1,747,435	2,083,295	770,410	2,329,955	3,100,365
1991	662,660	1,711,683	2,374,343	377,438	661,025	1,038,463	1,040,098	2,372,708	3,412,806
1992	360,681	746,341	1,107,022	403,755	777,311	1,181,066	764,436	1,523,652	2,288,088
1993	364,261	926,892	1,291,154	333,116	1,199,050	1,532,166	697,377	2,125,942	2,823,319
1994	769,465	1,595,176	2,364,641	197,444	416,377	613,821	966,909	2,011,553	2,978,462
1995	366,495	666,800	1,033,295	373,425	1,315,862	1,689,287	739,920	1,982,662	2,722,582
1996	464,748	1,688,224	2,152,972	284,389	705,657	990,046	749,137	2,393,881	3,143,018
1997	396,668	234,492	631,160	378,950	535,191	914,141	775,618	769,683	1,545,301
1998	410,659	313,027	723,686	290,469	816,851	1,107,320	701,128	1,129,878	1,831,006
1999	457,424	2,022,354	2,479,777	258,542	1,723,915	1,982,458	715,966	3,746,269	4,462,235
2000	^e 536,141	1,575,855	2,111,996	269,084	575,597	844,681	805,225	2,151,452	2,956,677
2001	744,013	563,076	1,307,089	392,905	1,214,403	1,607,308	1,136,918	1,777,479	2,914,397

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Table 9.-Page 2 of 2.

Year	Early Run			Late Run			Total Run ^{abc}		
	Esc.	Catch	Run	Esc.	Catch	Run	Esc.	Catch	Run
2002	^f 380,701	684,715	1,065,416	344,502	565,339	909,841	725,203	1,250,054	1,975,257
2003	^f 349,673	640,048	989,721	262,316	652,107	914,423	611,989	1,292,155	1,904,144
2004	^f 363,800	727,975	1,091,775	214,459	192,465	406,924	578,259	920,441	1,498,700
Averages									
1982-01	496,623	1,123,601	1,620,224	325,580	846,437	1,172,017	822,204	1,970,038	2,792,241
1992-01	487,055	1,033,224	1,520,279	318,208	928,021	1,246,229	805,263	1,961,245	2,766,508
2002-03	365,187	662,382	1,027,569	303,409	608,723	912,132	668,596	1,271,105	1,939,701

^a Includes 80% of the catches for the entire season from Cape Igvak and SEDM for years between 1954-1972 and 1982. From 1973 to 2001, includes 80% of the catch from Cape Igvak and most of SEDM through July 25. Since 2002 includes 90% of catch from Cape Igvak and 80% of most of the SEDM through July 25.

^b Does not include home pack or subsistence fish.

^c Includes catches from the Chignik Lagoon test fishery.

^d Escapement, catch, and total run for Black Lake and Chignik Lake were recalculated in 2001 for all years between 1973-1999, excluding 1982, where stock separation data were not available. The 2001 recalculations were done using stock separation percentages, daily weir counts, and updated fish ticket catch information, including 80% of the Cape Igvak and most of SEDM harvest through July 25. These numbers supersede any previously published numbers. Numbers could not be recalculated for years prior to 1973 because data were not available.

^e Approximately 200,000 additional sockeye salmon were observed during aerial surveys of Black Lake tributaries.

^f Includes home pack fish.

Table 10.—Estimated pink salmon escapement in the Chignik Management Area, by district and year, 1960 to 2004. All estimates are via aerial survey, with the exception of Chignik River weir estimate, which is included in the Chignik Bay District estimate.

Year ^a	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1960	N/A	28,000	130,000	48,600	123,800	330,400
1961	N/A	4,650	9,500	60,100	34,750	109,000
1962	30,000	83,900	401,700	242,000	155,500	913,100
1963	20,700	92,600	126,200	305,000	162,000	706,500
1964	20,000	131,100	605,700	165,000	72,000	993,800
1965	11,000	65,800	64,800	152,000	82,000	375,600
1966	71,300	62,600	302,200	179,300	90,000	705,400
1967	5,700	18,500	56,100	104,400	155,300	340,000
1968	81,400	66,100	390,300	151,300	128,700	817,800
1969	11,700	69,600	46,000	422,000	218,600	767,900
1970	43,600	60,700	201,700	202,000	72,600	580,600
1971	5,500	74,800	23,000	268,800	45,000	417,100
1972	5,800	3,100	15,900	8,600	7,800	41,200
1973	2,200	50,200	12,800	62,400	31,500	159,100
1974	4,000	9,800	76,200	77,400	60,200	227,600
1975	1,200	26,400	23,500	141,700	45,300	238,100
1976	12,300	66,000	228,800	114,200	89,300	510,600
1977	3,000	199,900	76,000	355,500	115,400	749,800
1978	10,700	101,200	309,300	333,400	157,500	912,100
1979	1,200	297,000	194,300	185,000	181,300	858,800
1980	3,000	99,400	425,500	139,500	74,800	742,200
1981	1,400	76,500	154,700	249,300	116,000	597,900
1982	2,400	26,100	301,500	45,900	13,400	389,300
1983	1,000	11,000	46,300	36,000	64,500	158,800
1984	123,200	94,000	486,500	188,000	109,800	1,001,500
1985	N/A	7,400	212,100	67,500	235,200	522,200
1986	N/A	121,900	580,700	43,800	180,500	926,900
1987	N/A	65,700	215,600	38,300	65,700	385,300
1988	22,400	216,400	1,005,400	232,400	181,300	1,657,900
1989	13,500	215,000	881,000	57,900	267,400	1,434,800
1990	6,000	131,900	811,400	44,300	88,400	1,082,000
1991	12,200	201,100	125,000	96,800	343,500	778,600
1992	55,800	223,800	1,318,100	38,800	190,400	1,826,900
1993	2,000	160,900	524,700	45,800	448,400	1,181,800
1994	75,800	178,900	863,300	111,600	153,900	1,383,500
1995	180,500	715,500	1,399,300	554,700	582,100	3,432,100
1996	43,100	237,100	1,059,600	220,800	395,700	1,956,300
1997	59,400	594,600	1,287,700	306,300	221,500	2,469,500
1998	24,400	210,900	1,273,200	150,400	222,800	1,881,700
1999	37,300	374,300	615,100	137,900	179,700	1,344,300
2000	27,400	146,100	810,700	130,100	98,700	1,213,000
2001	19,700	460,400	1,470,200	263,000	150,200	2,363,500

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Table 10.– Page 2 of 2.

Year ^a	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
2002	16,917	85,755	777,710	85,501	62,170	1,028,053
2003	143,897	576,510	1,408,060	117,650	99,500	2,345,617
2004	27,300	257,000	601,900	94,340	134,320	1,114,860
Averages						
1982-01	41,535	219,650	764,370	140,515	209,655	1,369,495
1992-01	52,540	330,250	1,062,190	195,940	264,340	1,905,260
2002-03	80,407	331,133	1,092,885	101,576	80,835	1,686,835

^a Post 1984 escapement estimates computed by area-under-the-curve methods using a 15.0 day average stream life (Johnson and Barrett 1988).

Table 11.—Estimated chum salmon escapement in the Chignik Management Area, by district and year, 1960 to 2004.

Year ^a	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1960	2,210	28,120	41,100	20,900	25,900	118,230
1961	20	0	8,380	2,000	0	10,400
1962	6,700	40,400	79,600	83,100	10,500	220,300
1963	800	34,000	55,200	10,000	7,000	107,000
1964	2,500	24,200	165,400	37,000	26,000	255,100
1965	3,000	19,200	58,000	25,000	7,000	112,200
1966	4,500	10,000	58,000	12,000	20,400	104,900
1967	4,000	17,200	89,800	24,000	5,700	140,700
1968	1,000	14,500	63,000	9,600	1,800	89,900
1969	1,500	6,500	66,500	27,600	1,000	103,100
1970	21,000	23,400	126,000	49,700	13,000	233,100
1971	7,100	29,100	219,200	184,100	30,000	469,500
1972	3,300	14,200	107,400	59,000	11,500	195,400
1973	700	12,200	59,100	35,600	9,300	116,900
1974	2,100	18,100	76,300	39,400	12,500	148,400
1975	2,100	18,800	41,300	43,400	20,500	126,100
1976	2,400	17,800	122,300	55,000	8,900	206,400
1977	2,000	9,300	54,500	70,400	15,400	151,600
1978	2,100	13,800	55,800	27,300	5,300	104,300
1979	1,600	44,800	79,500	42,500	12,800	181,200
1980	300	34,200	107,000	56,500	29,100	227,100
1981	500	26,100	126,000	70,300	19,300	242,200
1982	1,400	49,400	145,400	35,400	23,600	255,200
1983	100	17,000	50,200	20,100	8,200	95,600
1984	300	35,400	214,700	73,800	46,000	370,200
1985	0	9,600	4,900	34,600	12,900	62,000
1986	0	31,000	8,500	5,300	7,700	52,500
1987	100	17,500	38,300	19,700	9,800	85,400
1988	15,300	55,800	221,900	27,400	41,400	361,800
1989	4,200	34,700	74,300	7,400	15,900	136,500
1990	1,500	28,000	139,700	28,800	55,800	253,800
1991	0	18,000	70,400	38,100	343,200	469,700
1992	100	173,100	306,900	53,300	40,300	573,700
1993	300	39,400	135,200	14,000	66,800	255,700
1994	1,500	102,600	129,200	23,000	126,000	382,300
1995	10,300	44,500	112,800	45,700	134,600	347,900
1996	16,400	45,100	130,500	44,500	132,000	368,500
1997	18,500	65,700	290,000	60,500	152,800	587,500
1998	4,500	32,000	97,700	30,600	214,500	379,300
1999	2,300	32,400	167,100	16,300	117,300	335,400
2000	100	22,700	216,000	12,700	51,900	303,400
2001	4,100	36,500	406,900	35,500	67,800	550,800

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Table 11.– Page 2 of 2.

Year ^a	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
2002	67	11,615	174,850	17,082	32,020	235,634
2003	899	43,191	152,854	39,050	64,331	300,325
2004	376	30,310	277,240	3,100	38,492	349,518
Averages						
1982-01	1,840	33,230	99,850	39,215	36,895	211,030
1992-01	2,160	42,010	112,980	30,850	58,120	246,120
2002-03	483	27,403	163,852	28,066	48,176	267,980

^a Post 1984 escapement estimates computed by area-under-the-curve methods using a 15.0 day average stream life (Johnson and Barrett 1988).

Table 12.—Total commercial salmon harvest, including home pack and the department's test fishery harvest, from the Chignik Management Area by species and year, 1970 through 2004.

Year	Permits	Landings	Number of Salmon					Total
			Chinook	Sockeye	Coho	Pink	Chum	
1970	80	2,343	1,226	1,325,734	15,348	1,157,172	437,252	2,939,155
1971	77	2,383	2,010	1,016,136	14,557	612,290	353,952	2,001,405
1972	80	1,626	464	378,218	19,615	72,161	78,298	550,462
1973	80	2,187	525	870,354	22,322	25,472	8,717	929,657
1974	94	2,286	255	662,905	12,245	69,515	34,312	781,612
1975	86	1,844	549	399,593	53,283	66,165	25,161	546,681
1976	77	2,407	2,290	1,163,728	35,167	395,287	81,403	1,680,359
1977	88	2,426	710	1,972,207	17,430	604,806	110,452	2,708,119
1978	95	3,005	1,603	1,576,283	20,212	985,114	120,889	2,707,201
1979	103	3,009	1,253	1,049,691	99,129	1,905,198	188,907	3,247,290
1980	104	3,134	2,344	859,966	119,573	1,093,184	252,521	2,330,826
1981	105	4,222	2,694	1,839,469	78,805	1,162,613	580,332	3,668,240
1982	103	3,606	5,236	1,521,686	300,273	873,384	390,096	3,094,384
1983	102	4,357	5,488	1,824,175	61,927	321,178	159,412	2,376,639
1984	100	3,927	4,318	2,660,619	110,128	444,804	63,303	3,287,199
1985	110	3,392	1,888	922,151	191,188	160,128	22,806	1,301,663
1986	102	4,178	3,037	1,645,834	116,633	647,125	176,640	2,593,549
1987	105	3,862	2,651	1,898,838	150,414	246,775	127,261	2,429,906
1988	102	3,895	7,296	795,841	370,420	2,997,159	267,775	4,442,488
1989	101	3,183	3,542	1,159,287	68,233	27,712	1,624	1,263,682
1990	102	5,405	9,901	2,093,650	130,131	550,008	270,004	3,059,201
1991	103	3,856	3,157	1,895,665	165,625	1,169,248	261,096	3,498,750
1992	102	4,172	10,832	1,277,449	310,943	1,554,073	222,134	3,379,705
1993	103	4,241	19,515	1,697,351	229,459	1,648,377	122,360	3,721,406
1994	100	3,707	3,919	1,618,973	237,204	431,063	227,276	2,522,242
1995	101	5,113	5,493	1,724,045	281,518	2,057,998	380,954	4,455,222
1996	101	4,565	3,145	1,958,393	193,246	189,068	120,891	2,469,409
1997	100	3,394	3,120	770,347	90,908	844,431	155,905	1,868,205
1998	86	3,348	4,503	1,054,439	129,539	776,988	128,996	2,097,899
1999	91	4,382	3,507	3,116,527	89,610	1,698,651	140,597	5,053,365
2000	100	3,268	2,612	1,775,225	123,222	428,064	120,957	2,453,448
2001	93	2,906	2,939	1,511,587	131,448	1,281,767	199,003	3,129,743
2002	42	2,432	1,521	1,050,553	49,372	66,050	54,559	1,224,529
2003	44	2,073	3,068	1,100,297	103,896	502,638	64,044	1,776,060
2004	33	1,346	2,520	704,652	37	2,380	505	711,473
Averages								
1982-01	100	3,938	5,305	1,646,104	174,103	917,400	177,955	2,924,905
1992-01	98	3,910	5,959	1,650,434	181,710	1,091,048	181,907	3,115,064
2002-03	43	2,253	2,295	1,075,425	76,634	284,344	59,302	1,500,295

Table 13.—Commercial salmon fishing effort and catch by fleet and by day in the Chignik Management Area, 2004. These data include fish retained for home pack but do not include the department's test fishery harvests.

Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
6/4	7	8	0	0	3,204	21,007	0	0	0	0	0	0	3,204	21,007
6/5	7	9	0	0	5,237	34,059	0	0	0	0	0	0	5,237	34,059
6/6	11	17	0	0	5,169	32,194	0	0	0	0	0	0	5,169	32,194
6/7	13	19	0	0	8,817	56,185	0	0	0	0	0	0	8,817	56,185
6/8	17	25	1	15	11,572	73,872	0	0	0	0	0	0	11,573	73,887
6/9	17	20	0	0	16,520	108,814	0	0	0	0	0	0	16,520	108,814
6/10	18	32	0	0	18,105	116,276	0	0	0	0	0	0	18,105	116,276
6/11	18	39	4	71	29,552	196,741	0	0	0	0	0	0	29,556	196,812
6/12	17	36	4	128	21,728	139,601	0	0	0	0	0	0	21,732	139,729
6/13	18	48	5	152	26,454	170,641	0	0	0	0	0	0	26,459	170,793
6/14	17	38	5	85	24,049	154,418	0	0	0	0	0	0	24,054	154,503
6/15	17	28	11	164	25,736	172,708	0	0	0	0	0	0	25,747	172,872
6/16	14	25	9	113	14,111	89,166	0	0	0	0	0	0	14,120	89,279
6/17	18	50	5	89	47,138	293,335	0	0	0	0	0	0	47,143	293,424
6/18	10	13	1	7	22,848	147,970	0	0	0	0	0	0	22,849	147,977
6/19	25	53	14	232	43,671	277,635	0	0	0	0	0	0	43,685	277,867
6/20	19	28	21	289	17,599	110,353	0	0	0	0	0	0	17,620	110,642
6/21	14	22	11	104	10,004	64,010	0	0	0	0	0	0	10,015	64,114
6/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/25	10	13	86	1,822	18,949	126,052	1	7	2	6	4	28	19,042	127,915
6/26	32	63	116	2,620	34,004	215,284	0	0	0	0	2	15	34,122	217,919
6/27	20	47	72	1,195	24,342	149,948	0	0	0	0	0	0	24,414	151,143
6/28	19	53	52	924	23,632	142,292	0	0	1	6	0	0	23,685	143,222
6/29	18	44	26	514	17,183	111,461	0	0	0	0	0	0	17,209	111,975
6/30	11	11	14	263	4,989	31,238	0	0	0	0	0	0	5,003	31,501
7/1	15	21	38	779	9,693	61,355	0	0	0	0	1	6	9,732	62,140
7/2	17	42	91	1,915	21,831	138,509	0	0	0	0	0	0	21,922	140,424
7/3	17	40	111	2,273	17,941	113,352	0	0	0	0	0	0	18,052	115,625
Early-run total ^a			697	13,754	524,078	3,348,476	1	7	3	12	7	49	524,786	3,362,298

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Table 13.--Page 2 of 3.

Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
7/4	18	42	167	2,823	16,990	107,944	0	0	0	0	0	0	17,157	110,767
7/5	10	10	103	2,187	10,470	68,424	0	0	10	27	3	20	10,586	70,658
7/6	30	50	145	3,291	21,062	132,710	1	7	4	9	6	38	21,218	136,055
7/7	14	35	78	1,903	11,774	75,327	0	0	0	0	1	8	11,853	77,238
7/8	16	29	223	3,199	9,032	56,384	0	0	0	0	0	0	9,255	59,583
7/9	14	21	179	2,878	8,837	55,250	0	0	0	0	5	32	9,021	58,160
7/10	15	35	248	4,265	15,089	95,920	0	0	0	0	4	31	15,341	100,216
7/11	15	44	169	3,422	13,645	85,916	0	0	11	28	2	13	13,827	89,379
7/12	10	10	13	339	4,373	28,718	0	0	9	39	3	29	4,398	29,125
7/13	15	21	12	126	6,583	42,595	0	0	0	0	11	103	6,606	42,824
7/14	5	8	1	2	2,781	18,075	0	0	0	0	11	95	2,793	18,172
7/15	7	8	14	300	3,110	20,119	0	0	0	0	2	12	3,126	20,431
7/16	7	7	16	306	2,527	16,781	1	7	86	305	10	60	2,640	17,459
7/17	12	15	62	1,411	6,652	44,890	0	0	37	125	31	256	6,782	46,682
7/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/19	11	12	8	192	2,439	16,204	0	0	0	0	5	33	2,452	16,429
7/20	13	20	72	1,138	7,111	48,597	0	0	114	512	36	294	7,333	50,541
7/21	8	11	44	826	5,034	34,604	0	0	78	283	43	393	5,199	36,106
7/22	10	17	46	792	4,123	27,689	0	0	100	315	15	98	4,284	28,894
7/23	6	8	16	227	3,123	20,023	0	0	79	241	14	106	3,232	20,597
7/24	9	10	18	337	3,010	19,939	0	0	73	235	7	44	3,108	20,555
7/25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/26	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/27	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/28	9	20	16	266	4,328	26,613	24	196	370	1,107	103	733	4,841	28,915
7/29	10	10	9	207	2,800	17,933	0	0	211	642	46	325	3,066	19,107
7/30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/31	13	20	35	619	3,009	19,272	5	39	262	843	15	120	3,326	20,893
8/1	8	10	38	676	1,441	9,218	1	7	225	738	35	274	1,740	10,913
8/2	6	8	27	456	1,737	11,123	2	10	179	535	47	332	1,992	12,456

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Table 13.—Page 3 of 3.

Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
8/3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/5	4	6	4	55	836	5,350	0	0	106	320	16	115	962	5,840
8/6	3	3	21	305	1,306	8,369	1	5	165	501	25	179	1,518	9,359
8/7	4	4	4	34	1,009	6,300	1	5	210	629	2	11	1,226	6,979
8/8	2	2	3	41	424	2,672	0	0	48	143	0	0	475	2,856
8/9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Late-run Total			1,791	32,623	174,655	1,122,959	36	276 0	2,377	7,577	498	3,754	179,357	1,167,189
Season Total			2,488	46,377	698,733	4,471,435	37	283 0	2,380	7,589	505	3,803	704,143	4,529,487

^a Sockeye salmon harvested through July 3 are considered early-run because of an estimated one-day travel time between the commercial fishery in Chignik Lagoon and the Chignik weir. Sockeye salmon escapements through July 4 are considered early-run.

Table 14.—Total sockeye salmon commercial, home pack, test fish, Cape Igvak, and SEDM harvests by day, 2004.

Date	Commercial	Home Pack	Test Fish	Cape Igvak ^a	SEDM ^b	Total	Cumulative
6/4	3,204	0	0	0	0	3,204	3,204
6/5	5,237	0	0	0	0	5,237	8,441
6/6	5,169	0	0	0	0	5,169	13,610
6/7	8,817	0	0	0	0	8,817	22,427
6/8	11,572	0	0	0	0	11,572	33,999
6/9	16,520	0	0	15,403	0	31,923	65,922
6/10	18,105	0	0	9,598	0	27,703	93,624
6/11	29,552	0	0	0	0	29,552	123,176
6/12	21,728	0	0	0	0	21,728	144,904
6/13	26,454	0	0	0	0	26,454	171,358
6/14	24,013	36	0	0	0	24,049	195,407
6/15	25,736	0	0	0	1,023	26,759	222,166
6/16	14,086	25	0	8,015	12,097	34,223	256,390
6/17	47,132	6	0	15,851	0	62,989	319,378
6/18	22,848	0	0	14,620	0	37,468	356,846
6/19	43,665	6	0	33,567	0	77,238	434,084
6/20	17,584	15	0	23,252	0	40,851	474,936
6/21	10,004	0	0	19,415	13,191	42,610	517,546
6/22	0	0	0	20,945	0	20,945	538,491
6/23	0	0	3,069	0	0	3,069	541,560
6/24	0	0	0	0	0	0	541,560
6/25	18,949	0	0	0	0	18,949	560,509
6/26	33,970	34	0	0	11,002	45,006	605,514
6/27	24,342	0	2,850	0	0	27,192	632,706
6/28	23,630	2	0	0	0	23,632	656,338
6/29	17,168	15	0	0	0	17,183	673,521
6/30	4,989	0	0	0	0	4,989	678,510
7/1	9,693	0	0	0	0	9,693	688,203
7/2	21,831	0	0	0	0	21,831	710,034
7/3	17,941	0	0	0	0	17,941	727,975
7/4	16,990	0	0	0	0	16,990	744,965
7/5	10,470	0	0	0	0	10,470	755,435
7/6	21,062	0	0	0	0	21,062	776,497
7/7	11,774	0	0	0	0	11,774	788,271
7/8	9,032	0	0	0	0	9,032	797,303
7/9	8,687	150	0	0	10,786	19,623	816,926
7/10	15,067	22	0	0	7,025	22,114	839,040
7/11	13,625	20	0	0	0	13,645	852,685
7/12	4,373	0	0	0	0	4,373	857,058
7/13	6,478	105	0	0	0	6,583	863,641
7/14	2,781	0	0	0	0	2,781	866,422
7/15	3,110	0	0	0	0	3,110	869,532
7/16	2,527	0	0	0	0	2,527	872,059
7/17	6,652	0	0	0	0	6,652	878,711
7/18	0	0	0	0	0	0	878,711
7/19	2,437	2	0	0	0	2,439	881,150
7/20	6,895	216	0	0	0	7,111	888,261

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Table 14.—Page 2 of 2.

Date	Commercial	Home Pack	Test Fish	Cape Igvak ^a	SEDM ^b	Total	Cumulative
7/21	5,034	0	0	0	0	5,034	893,295
7/22	4,083	40	0	0	0	4,123	897,418
7/23	3,123	0	0	0	0	3,123	900,541
7/24	3,000	10	0	0	0	3,010	903,551
7/25	0	0	0	0	0	0	903,551
7/26	0	0	0			0	903,551
7/27	0	0	0			0	903,551
7/28	4,328	0	0			4,328	907,879
7/29	2,775	25	0			2,800	910,679
7/30	0	0	0			0	910,679
7/31	2,076	933	0			3,009	913,688
8/1	1,441	0	0			1,441	915,129
8/2	1,737	0	0			1,737	916,866
8/3	0	0	0			0	916,866
8/4	0	0	0			0	916,866
8/5	836	0	0			836	917,702
8/6	1,306	0	0			1,306	919,008
8/7	1,009	0	0			1,009	920,017
8/8	396	28	0			424	920,441
8/9	0	0	0			0	920,441
8/10	0	0	0			0	920,441
8/11	0	0	0			0	920,441
8/12	0	0	0			0	920,441
8/13	0	0	0			0	920,441
8/14	0	0	0			0	920,441
8/15	0	0	0			0	920,441
8/16	0	0	0			0	920,441
8/17	0	0	0			0	920,441
8/18	0	0	0			0	920,441
8/19	0	0	0			0	920,441
8/20	0	0	0			0	920,441
Total	697,043	1,690	5,919	160,665	55,123	920,441	

^a Includes 90 percent of the Cape Igvak sockeye salmon harvest through July 25.

^b Includes 80 percent of the sockeye salmon harvest in specific areas of the SEDM through July 25.

Table 15.—Total sockeye salmon commercial Chignik Management Area (CMA), home pack, test fish, Cape Igvak, and SEDM harvests by year, 1970 to 2004.

Date	Commercial CMA	Home Pack	Test Fish	Cape Igvak ^a	SEDM ^a	Total Chignik Harvest
1970	1,325,734			434,394	68,181	1,828,309
1971	1,016,136			197,614	51,272	1,265,022
1972	378,218			33,865	17,752	429,835
1973	870,354			57,348	37,983	965,685
1974	662,905			122,071	68,029	853,005
1975	399,593			23,635	2,205	425,433
1976	1,163,728			117,926	44,730	1,326,384
1977	1,972,207			128,852	35,502	2,136,561
1978	1,576,283			227,014	22,064	1,825,361
1979	1,049,691			13,950	56,878	1,120,519
1980	859,966			32	63,724	923,722
1981	1,839,469			282,727	122,533	2,244,729
1982	1,521,686			167,401	62,767	1,751,854
1983	1,824,175			318,048	227,392	2,369,615
1984	2,660,619			449,372	423,068	3,533,059
1985	922,151			123,627	51,421	1,097,199
1986	1,645,834			188,017	118,006	1,951,857
1987	1,898,538			321,506	146,886	2,366,930
1988	792,416		3,425	11,218	19,320	826,379
1989	1,152,854		6,433	0	4,485	1,163,772
1990	2,088,128		5,522	107,706	128,599	2,329,955
1991	1,887,559		8,106	324,329	152,714	2,372,708
1992	1,265,026		12,423	152,358	93,845	1,523,652
1993	1,691,907		5,444	300,055	128,536	2,125,942
1994	1,609,834		9,139	250,230	142,350	2,011,553
1995	1,715,022		9,023	169,530	88,302	1,981,877
1996	1,954,036	40	4,317	308,327	127,201	2,393,921
1997	758,384	664	11,299	0	0	770,347
1998	1,041,798	267	12,374	8,813	66,893	1,130,145
1999	3,110,507	26	5,994	456,147	173,621	3,746,295
2000	1,763,621	0	11,604	272,808	103,419	2,151,452
2001	1,497,359	217	14,011	215,214	79,037	1,805,838
2002	1,040,081	1,371	9,101	136,488	63,026	1,250,067
2003	1,092,304	2,411	5,582	121,887	69,935	1,292,119
2004	697,043	1,690	5,919	160,665	55,123	920,441
Averages						
1982-01	1,640,073	202	8,508	207,235	116,893	1,970,218
1992-01	1,640,749	202	9,563	213,348	100,320	1,964,102
2002-03	1,066,193	1,891	7,342	129,188	66,481	1,271,093

^a Through 2001, the Cape Igvak and Southeastern District Mainland figures represent 80% of the total sockeye salmon catch for those areas, based on the premise that 80% of the sockeye caught in those areas are destined for Chignik (excluding sockeye caught in the Northwest Stepovak Section from 1964 to 1991 and during July 1996, and Orzinski Bay from 1992 to 1995). In 2002 for the Cape Igvak fishery, the BOF increased the percentage of sockeye salmon harvest considered Chignik bound from 80% to 90%. The figures reported in this table are the portion of the catches considered Chignik-bound.

Table 16.– Chignik Management Area allocation calculations, 2004. Commercial test fishery harvests are not included in the calculations, but fish retained as home pack are included.

Date	Daily Harvest		Cumulative Harvest		Allocation Percentage ^a	
	Cooperative	Competitive	Cooperative	Competitive	Cooperative	Competitive
6/4	3,204	0	3,204	0	100.0%	0.0%
6/5	5,237	0	8,441	0	100.0%	0.0%
6/6	5,169	0	13,610	0	100.0%	0.0%
6/7	8,817	0	22,427	0	100.0%	0.0%
6/8	11,572	0	33,999	0	100.0%	0.0%
6/9	16,520	0	50,519	0	100.0%	0.0%
6/10	18,105	0	68,624	0	100.0%	0.0%
6/11	29,552	0	98,176	0	100.0%	0.0%
6/12	21,728	0	119,904	0	100.0%	0.0%
6/13	26,454	0	146,358	0	100.0%	0.0%
6/14	24,049	0	170,407	0	100.0%	0.0%
6/15	25,736	0	196,143	0	100.0%	0.0%
6/16	14,111	0	210,254	0	100.0%	0.0%
6/17	47,138	0	257,392	0	100.0%	0.0%
6/18	0	22,848	257,392	22,848	91.8%	8.2%
6/19	29,841	13,830	287,233	36,678	88.7%	11.3%
6/20	17,599	0	304,832	36,678	89.3%	10.7%
6/21	10,004	0	314,836	36,678	89.6%	10.4%
6/22	0	0	314,836	36,678	89.6%	10.4%
6/23	0	0	314,836	36,678	89.6%	10.4%
6/24	0	0	314,836	36,678	89.6%	10.4%
6/25	0	18,949	314,836	55,627	85.0%	15.0%
6/26	20,462	13,542	335,298	69,169	82.9%	17.1%
6/27	24,342	0	359,640	69,169	83.9%	16.1%
6/28	23,632	0	383,272	69,169	84.7%	15.3%
6/29	17,183	0	400,455	69,169	85.3%	14.7%
6/30	4,989	0	405,444	69,169	85.4%	14.6%
7/1	9,693	0	415,137	69,169	85.7%	14.3%
7/2	21,831	0	436,968	69,169	86.3%	13.7%
7/3	17,941	0	454,909	69,169	86.8%	13.2%
7/4	16,990	0	471,899	69,169	87.2%	12.8%
7/5	0	10,470	471,899	79,639	85.6%	14.4%
7/6	16,435	4,627	488,334	84,266	85.3%	14.7%
7/7	11,774	0	500,108	84,266	85.6%	14.4%
7/8	9,032	0	509,140	84,266	85.8%	14.2%
7/9	8,837	0	517,977	84,266	86.0%	14.0%
7/10	15,089	0	533,066	84,266	86.3%	13.7%
7/11	13,645	0	546,711	84,266	86.6%	13.4%
7/12	4,373	0	551,084	84,266	86.7%	13.3%
7/13	6,583	0	557,667	84,266	86.9%	13.1%
7/14	2,781	0	560,448	84,266	86.9%	13.1%
7/15	3,110	0	563,558	84,266	87.0%	13.0%
7/16	0	2,527	563,558	86,793	86.7%	13.3%
7/17	0	6,652	563,558	93,445	85.8%	14.2%

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Table 16.—Page 2 of 2.

Date	Daily Harvest		Cumulative Harvest		Allocation Percentage ^a	
	Cooperative	Competitive	Cooperative	Competitive	Cooperative	Competitive
7/18	0	0	563,558	93,445	85.8%	14.2%
7/19	2,439	0	565,997	93,445	85.8%	14.2%
7/20	7,111	0	573,108	93,445	86.0%	14.0%
7/21	5,034	0	578,142	93,445	86.1%	13.9%
7/22	4,123	0	582,265	93,445	86.2%	13.8%
7/23	3,123	0	585,388	93,445	86.2%	13.8%
7/24	3,010	0	588,398	93,445	86.3%	13.7%
7/25	0	0	588,398	93,445	86.3%	13.7%
7/26	0	0	588,398	93,445	86.3%	13.7%
7/27	0	0	588,398	93,445	86.3%	13.7%
7/28	4,328	0	592,726	93,445	86.4%	13.6%
7/29	2,800	0	595,526	93,445	86.4%	13.6%
7/30	0	0	595,526	93,445	86.4%	13.6%
7/31	3,009	0	598,535	93,445	86.5%	13.5%
8/1	1,441	0	599,976	93,445	86.5%	13.5%
8/2	1,737	0	601,713	93,445	86.6%	13.4%
8/3	0	0	601,713	93,445	86.6%	13.4%
8/4	0	0	601,713	93,445	86.6%	13.4%
8/5	836	0	602,549	93,445	86.6%	13.4%
8/6	1,306	0	603,855	93,445	86.6%	13.4%
8/7	1,009	0	604,864	93,445	86.6%	13.4%
8/8	424	0	605,288	93,445	86.6%	13.4%
8/9	0	0	605,288	93,445	86.6%	13.4%
8/10	0	0	605,288	93,445	86.6%	13.4%
8/11	0	0	605,288	93,445	86.6%	13.4%
8/12	0	0	605,288	93,445	86.6%	13.4%
8/13	0	0	605,288	93,445	86.6%	13.4%
8/14	0	0	605,288	93,445	86.6%	13.4%
8/15	0	0	605,288	93,445	86.6%	13.4%
8/16	0	0	605,288	93,445	86.6%	13.4%
8/17	0	0	605,288	93,445	86.6%	13.4%
8/18	0	0	605,288	93,445	86.6%	13.4%
8/19	0	0	605,288	93,445	86.6%	13.4%
8/20	0	0	605,288	93,445	86.6%	13.4%

^a The 2004 allocation was 87% for the cooperative fleet and 13% for the competitive fleet.

Table 17.—Harvest of sockeye salmon considered by regulation to be Chignik bound in the Chignik, Cape Igvak, and Southeastern District Mainland commercial salmon fisheries, from 1964 to 2004.

Year	Chignik		Cape Igvak ^a		Southeastern District Mainland ^a		Total
	Catch ^b	Percent	Catch ^b	Percent	Catch ^b	Percent	
1964 ^c	556,890	90.57	14,980	2.44	43,021	7.00	614,891
1965	599,553	89.94	11,021	1.65	56,020	8.40	666,594
1966	219,794	87.99	18,003	7.21	12,011	4.81	249,808
1967	462,000	91.48	23,014	4.56	20,021	3.96	505,035
1968	977,382	82.53	135,951	11.48	70,959	5.99	1,184,292
1969	394,135	78.96	97,982	19.63	7,013	1.41	499,130
1970	1,325,734	72.51	434,394	23.76	68,181	3.73	1,828,309
1971	1,016,136	80.33	197,614	15.62	51,272	4.05	1,265,022
1972	378,218	87.99	33,865	7.88	17,752	4.13	429,835
1964 to 1972 catch and percentage figures are totals for the entire season. Catch figures and percentages after 1972 are only through July 25.							
1973 ^d	769,258	88.97	57,348	6.63	37,983	4.39	864,589
1974	530,278	73.61	122,071	16.95	68,029	9.44	720,378
1975	115,984	81.78	23,635	16.67	2,205	1.55	141,824
1976	792,024	82.96	117,926	12.35	44,730	4.69	954,680
1977	1,547,285	90.40	128,852	7.53	35,502	2.07	1,711,639
1978 ^{e,f}	1,454,389	85.38	227,014	13.33	22,064	1.30	1,703,467
1979 ^g	794,504	91.81	13,950	1.61	56,878	6.57	865,332
1980	670,001	91.31	32	0.00	63,724	8.68	733,757
1981	1,606,300	79.85	282,727	14.06	122,533	6.09	2,011,560
1982	1,250,768	84.46	167,401	11.30	62,767	4.24	1,480,936
1983	1,450,832	72.68	318,048	15.93	227,392	11.39	1,996,272
1984	2,474,405	73.93	449,372	13.43	423,068	12.64	3,346,845
1985 ^h	696,169	79.91	123,627	14.19	51,421	5.90	871,217
1986	1,456,729	82.64	188,017	10.67	118,006	6.69	1,762,752
1987	1,659,615	77.99	321,506	15.11	146,886	6.90	2,128,007
1988	675,487	95.67	11,218	1.59	19,320	2.74	706,025
1989	496,044	99.10	0	0.00	4,485	0.90	500,529
1990	1,205,575	83.61	107,706	7.47	128,599	8.92	1,441,880
1991 ⁱ	1,958,954	80.42	324,329	13.31	152,714	6.27	2,435,997
1992 ^j	1,054,309	81.07	152,358	11.72	93,845	7.22	1,300,512
1993	1,495,098	77.72	300,055	15.60	128,536	6.68	1,923,689
1994 ^k	1,632,435	80.61	250,230	12.36	142,350	7.03	2,025,015
1995	1,024,785	79.90	169,530	13.22	88,302	6.88	1,282,617
1996 ^l	1,710,249	79.70	308,327	14.37	127,201	5.93	2,145,777
1997	443,892	100.00	0	0.00	0	0.00	443,892
1998 ^m	786,466	91.22	8,813	1.02	66,893	7.76	862,172
1999	2,326,811	78.70	456,147	15.43	173,621	5.87	2,956,579

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Table 17.—Page 2 of 2.

Year	Chignik		Cape Igvak ^a		Southeastern District Mainland ^a		Total
	Catch ^b	Percent	Catch ^b	Percent	Catch ^b	Percent	
2000	1,509,652	80.05	272,808	14.47	103,419	5.48	1,885,879
2001 ⁿ	1,143,990	79.54	215,214	14.96	79,037	5.50	1,438,241
2002	851,031	81.01	136,488	12.99	63,026	6.00	1,050,545
2003	855,179	81.68	121,887	11.64	69,935	6.68	1,047,001
2004	681,120	75.94	160,665	17.91	55,123	6.15	896,909
Averages							
1982-01	1,322,613	82.95	207,235	10.81	116,893	6.25	1,646,742
1992-01	1,312,769	82.85	213,348	11.32	100,320	5.84	1,626,437
2002-03	853,105	81.35	129,188	12.32	66,481	6.34	1,048,773

^a Through 2001, the Cape Igvak and Southeastern District Mainland figures represent 80% of the total sockeye salmon catch for those areas, based on the premise that only 80% of the sockeye caught in those areas are destined for Chignik (excluding sockeye caught in the Northwest Stepovak Section from 1964 to 1991 and during July 1996, and Orzinski Bay from 1992 to 1995). In 2002 for the Cape Igvak fishery, the BOF increased the percentage of sockeye salmon harvest considered Chignik bound from 80% to 90%. The figures reported in this table are the portion of the catches considered Chignik-bound.

^b Catch numbers were last modified from the ADF&G computerized historical fish ticket data base in 2003.

^c The data from 1964 to 1972 are based on total yearly catches. Prior to 1973 the Cape Igvak and Southeastern District Mainland fisheries were weekly fishing periods set by regulation, usually 5 days per week. Time modifications were implemented when poor escapements occurred at Chignik.

^d From 1974 through 1977 all three fisheries were managed on a day by day basis.

^e Beginning in 1978 the Cape Igvak Salmon Management Plan allocated up to 15% of the total catch of Chignik-bound sockeye salmon to Kodiak Management Area fishers.

^f In 1978 seining prior to July 11 was disallowed in the Southeastern District Mainland. Set gillnet fisheries were allowed for 3 days per week through July 10, after which the fishery was based on local stock abundance.

^g From 1979 through 1984 fishing in the Southeastern District Mainland was allowed for 5 days per week prior to July 11, with an estimated ceiling of 60,000 Chignik bound sockeye. If the Chignik Management Area catch was 1,000,000 or more before July 11 then the ceiling was removed.

^h Beginning in 1985 the Southeastern District Mainland (excluding the Northwest Stepovak Section and Orzinski Bay) was allowed an allocation of 6.2% of the total harvest of Chignik bound sockeye salmon through July 25. After July 25 the Southeast District Mainland was managed based on local stock abundance. The allocation level changed to 6.0% beginning in 1988, with seining still not allowed prior to July 11.

ⁱ Includes over escapement of 208,305 sockeye salmon, counted through the Chignik weir during a Chignik area seiners strike (June 23 to July 4).

^j Beginning in 1992, after Board of Fisheries review of historical records, the allocation of Chignik bound sockeye to the Southeastern District Mainland fishery (excluding Orzinski Bay) was increased to 7.0%, through July 25.

^k Includes over escapement of 208,921 sockeye salmon, counted through the Chignik weir during a Chignik area seiners strike (June 2 to June 25).

^l In January 1996 the BOF increased the area managed for local Orzinski Lake sockeye salmon from only Orzinski Bay to the entire Northwest Stepovak Section. Prior to July 1 the entire Northwest Stepovak Section will be managed by allocation based on Chignik sockeye salmon run strength. Beginning July 1 the Northwest Stepovak Section is managed entirely on local stocks. The BOF also decreased the percentage of Chignik bound sockeye salmon allocated to the Southeastern District Mainland fishery from 7.0 percent to 6.0 percent.

^m Includes 7,714 sockeye salmon caught on June 18 by the Chignik Seiners Association (CSA), and an overescapement of 52,131 sockeye salmon counted past the weir during the CSA boycott (June 16 to June 29).

ⁿ Includes 176,605 sockeye salmon caught June 16-29 by the Chignik Seiners Association, and foregone harvest due to overescapement of 398,887 in the CMA and 27,896 in the SEDM during the fishermen's strike (June 14 to July 2).

Table 18.—Value, by species, and average value per active permit, in dollars, in the Chignik Management Area, 1970 through 2004.

Year	Chinook		Sockeye		Coho		Pink		Chum		Total Value	Number of Permits	Value per Permit
	Total	Average	Total	Average	Total	Average	Total	Average	Total	Average			
1970	6,129	89	2,190,272	31,743	18,397	267	635,673	9,213	376,025	5,450	3,226,496	69	46,761
1971	6,472	84	2,034,279	26,419	23,240	302	366,693	4,762	326,760	4,244	2,757,444	77	35,811
1972	2,028	28	825,498	11,308	35,699	489	48,401	663	87,759	1,202	999,385	79	12,650
1973	5,255	72	3,030,057	41,508	73,663	1,009	20,610	282	10,180	139	3,139,765	77	40,776
1974	2,941	32	3,618,781	39,767	31,933	351	64,069	704	51,125	562	3,768,849	94	40,094
1975	6,561	76	1,384,271	16,240	213,539	2,581	104,115	12,211	61,704	717	1,770,190	86	20,584
1976	13,800	179	4,751,000	61,701	138,000	1,792	568,300	7,381	183,600	2,384	5,654,700	77	73,438
1977	18,828	212	14,553,720	163,525	104,819	1,178	920,881	10,347	368,066	4,136	15,966,314	88	181,435
1978	56,700	597	15,653,500	164,774	116,400	1,225	1,131,500	11,911	404,500	4,258	17,362,600	95	182,764
1979	32,050	317	11,345,503	112,332	710,192	7,031	2,622,269	25,963	126,866	1,256	14,836,880	101	146,900
1980	67,657	670	5,532,290	54,775	520,655	5,155	1,477,060	14,624	1,061,963	10,514	8,659,625	101	85,739
1981	75,231	730	17,262,119	167,593	439,900	4,271	1,881,334	18,265	2,431,421	23,606	22,090,005	103	214,466
1982	75,276	717	13,038,510	124,176	1,782,027	16,972	578,184	5,506	1,356,597	12,920	16,830,594	105	160,291
1983	96,159	962	10,728,088	107,281	219,650	2,197	240,171	2,402	421,713	4,217	11,705,781	100	117,058
1984	114,502	1,134	20,402,076	202,000	759,972	7,525	330,916	3,276	146,024	1,446	21,753,490	101	215,381
1985	67,088	664	7,997,834	79,186	1,471,418	14,568	140,076	1,387	59,475	589	8,735,891	101	86,494
1986	84,800	848	16,882,290	168,823	667,740	6,677	356,147	3,562	456,546	4,565	18,447,523	100	184,475
1987	72,739	706	24,783,033	240,612	1,035,129	10,050	269,868	2,620	339,819	3,299	26,500,588	102	259,810
1988	286,740	2,811	14,350,354	140,690	4,153,424	40,720	6,771,266	66,385	2,189,293	21,464	27,751,077	102	272,069
1989	78,999	790	13,047,378	130,474	436,892	4,369	32,994	3,299	4,745	47	13,601,008	100	136,010
1990	185,256	1,834	22,509,923	222,871	700,309	6,934	502,693	4,977	878,510	8,698	24,776,691	101	245,314
1991	50,027	486	11,002,784	106,823	650,626	6,317	402,916	3,912	502,860	4,882	12,609,213	101	124,844
1992	193,326	1,858	12,552,025	120,693	1,323,107	12,722	811,882	7,807	414,005	3,981	15,294,345	101	151,429
1993	175,690	1,722	8,210,106	80,491	730,622	7,163	637,666	6,252	184,012	1,804	9,938,096	102	97,432
1994	38,096	385	10,046,245	101,477	1,094,415	11,055	226,504	2,208	430,888	4,352	11,836,148	99	119,557
1995	60,174	602	11,969,210	119,692	834,337	8,343	977,811	9,778	634,780	6,348	14,476,312	100	144,763
1996	25,041	250	12,640,560	126,406	447,228	4,472	24,827	248	32,279	323	13,169,935	100	131,699
1997	20,642	211	4,860,589	49,598	453,905	4,632	348,042	3,551	239,400	2,443	5,922,577	98	60,434
1998	31,934	376	6,631,192	78,014	397,413	4,675	310,323	3,651	137,647	1,619	7,508,509	85	88,335
1999	27,212	299	21,132,550	232,226	170,931	1,878	578,861	6,361	118,547	1,303	22,028,101	91	242,067

-Continued-

Table 18. Page 2 of 2.

Year	Chinook		Sockeye		Coho		Pink		Chum		Total Value	Number of Permits	Value per Permit
	Total	Average	Total	Average	Total	Average	Total	Average	Total	Average			
2000	16,336	165	11,812,368	119,317	283,061	2,859	106,470	1,075	93,030	940	12,311,264	99	124,356
2001	12,205	133	7,419,339	80,645	263,160	2,860	366,714	3,986	209,239	2,274	8,270,657	92	89,898
2002	3,516	36	4,564,214	46,103	36,078	364	10,333	104	40,671	411	4,654,812	99	47,018
2003	25,291	250	5,365,014	53,119	128,663	1,274	156,285	1,547	62,709	621	5,737,962	101	56,812
2004 ^a	26,191	262	3,568,350	35,684	59	1	835	8	647	6	3,596,082	100	35,961
Averages													
1982-91	111,159	1,095	15,474,227	152,294	1,187,719	11,633	962,523	9,733	635,558	6,213	18,271,186	101	180,175
1992-01	60,066	600	10,727,418	110,856	599,818	6,066	438,910	4,492	249,383	2,539	12,075,594	97	124,997
2002-03	14,404	143	4,964,614	49,611	82,371	819	83,309	826	51,690	516	5,196,387	100	51,915

^a These values incorporate the initial price paid, and do not include any post-season adjustments by any processor. The 2004 exvessel prices per pound were:

Chinook	\$0.60
Sockeye	\$0.80
Coho	\$0.21
Pink	\$0.11
Chum	\$0.17

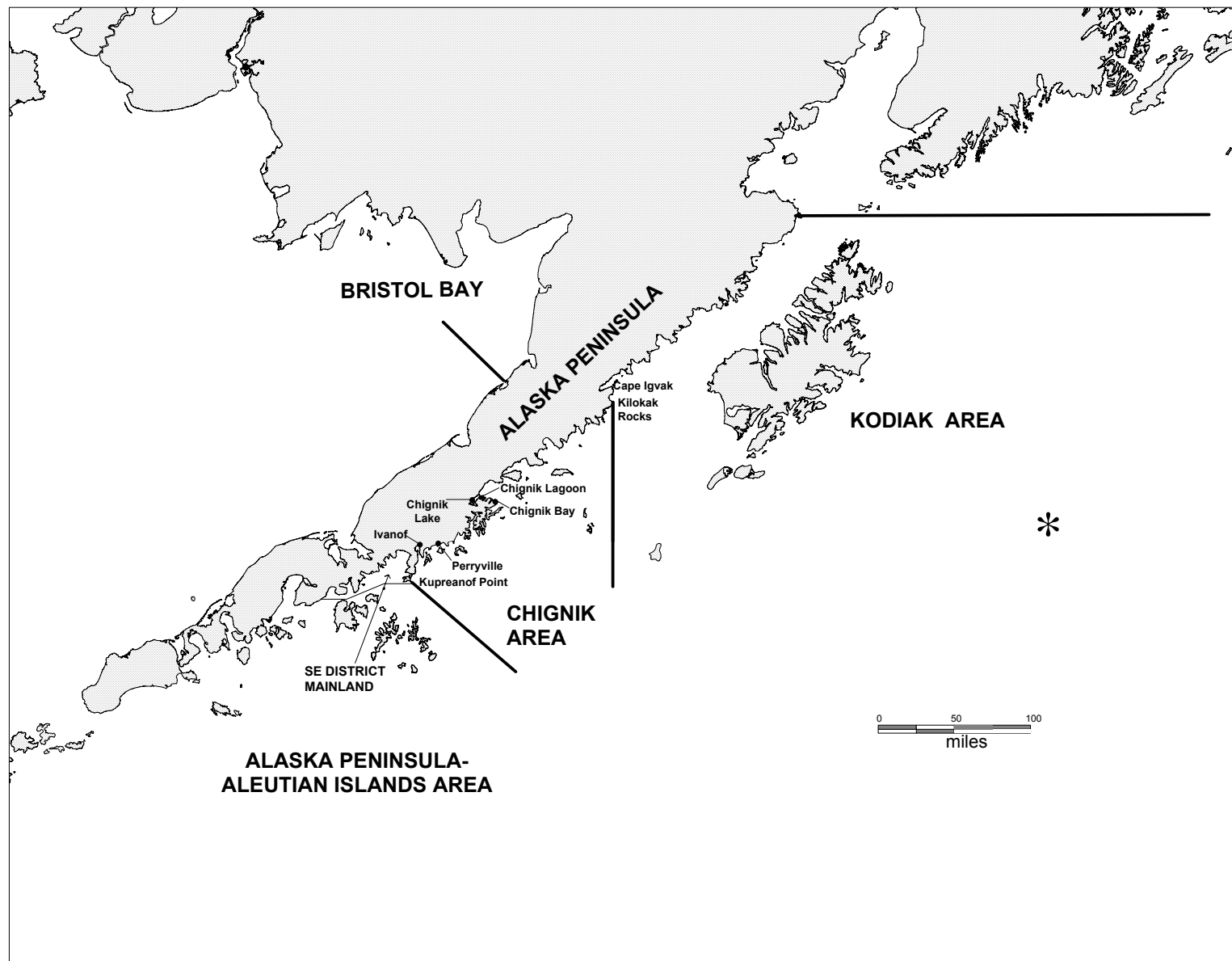


Figure 1.— Map of the Alaska Peninsula illustrating the relative locations of the Chignik, Kodiak, and Alaska Peninsula and Aleutian Islands Management Areas.

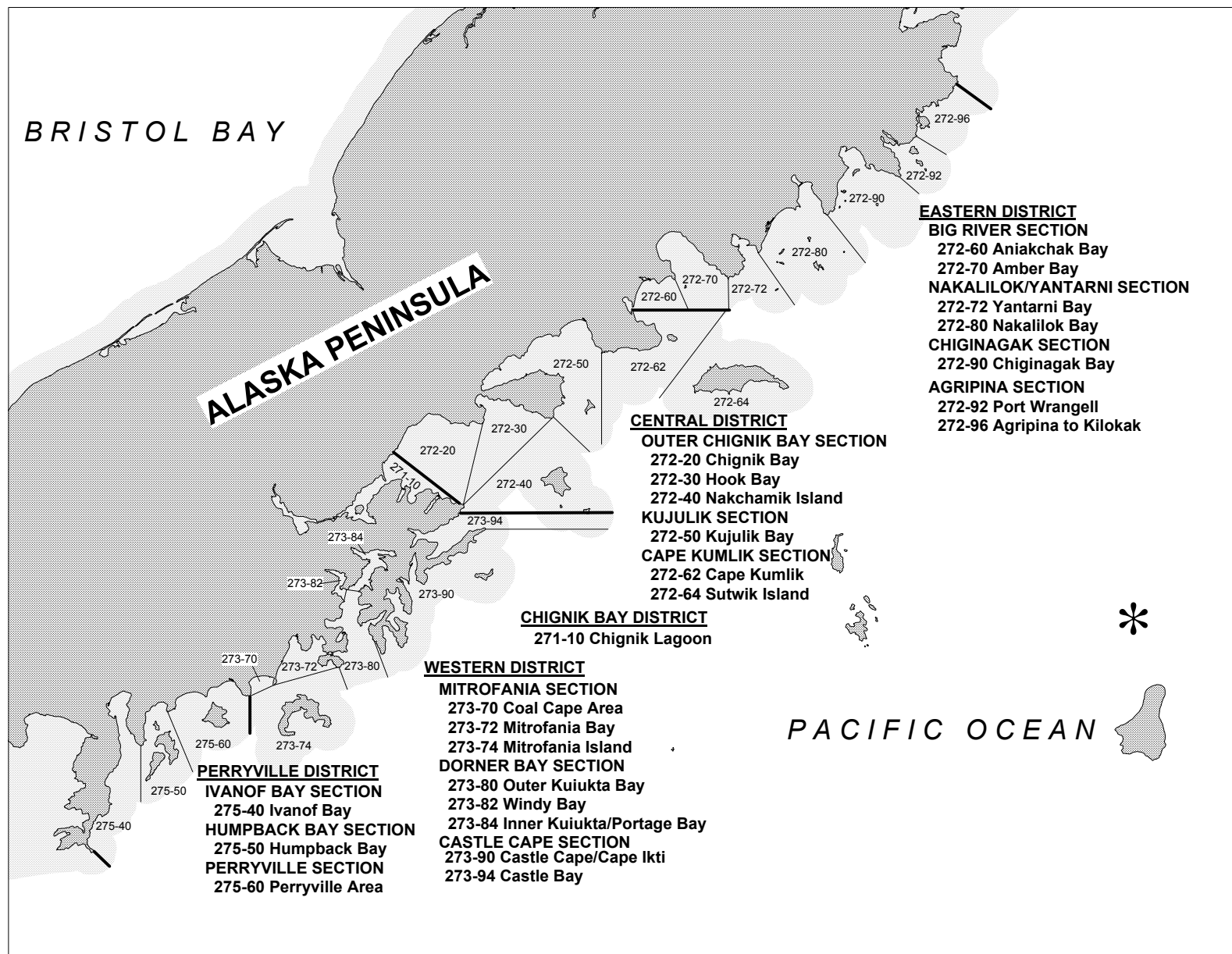


Figure 2.– Map of the Chignik Management Area illustrating district boundaries and statistical areas.

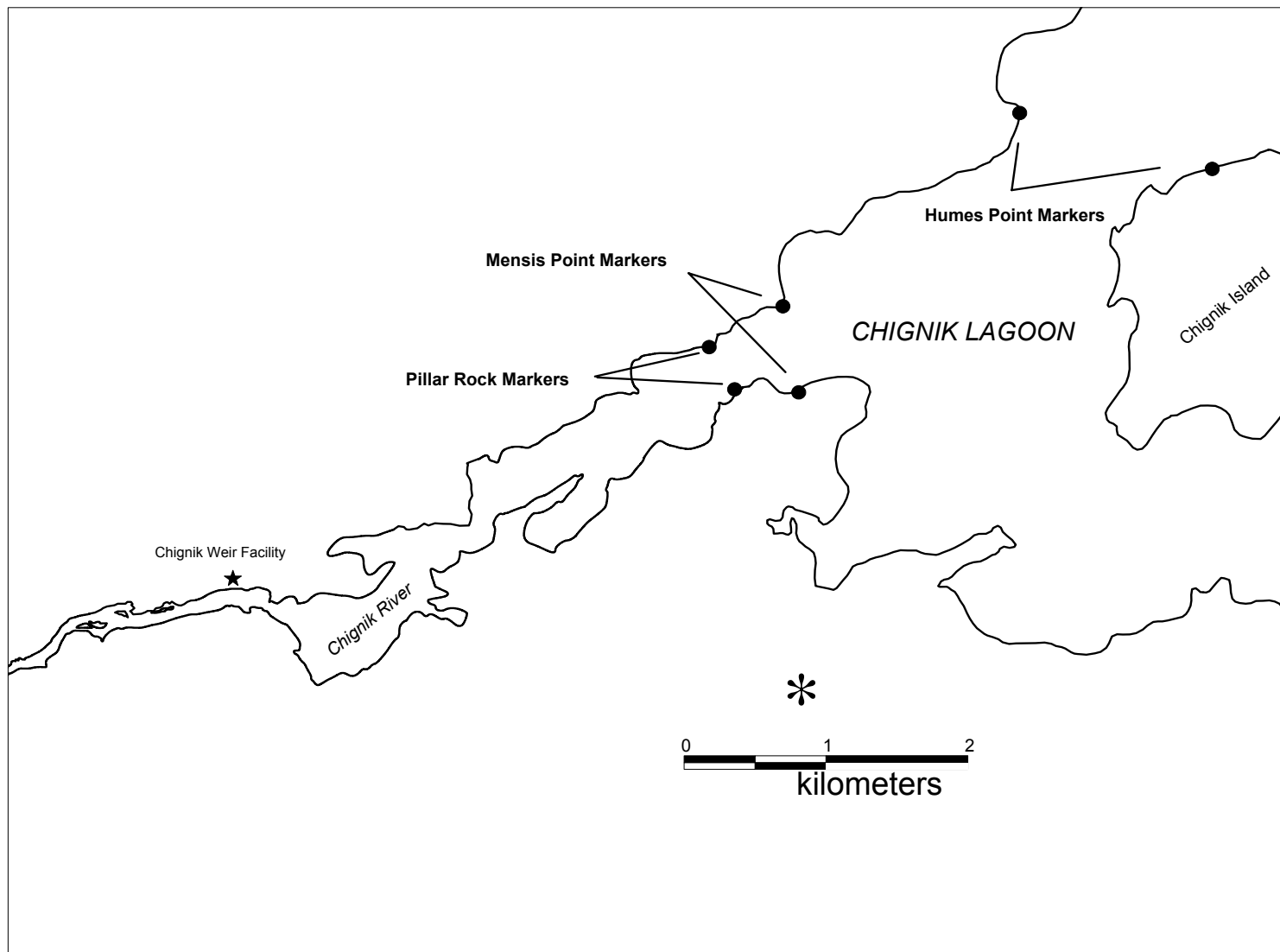


Figure 3.— Map of upper Chignik Lagoon showing the location of the Pillar Rock, Mensis Point, and Humes Point marker locations.

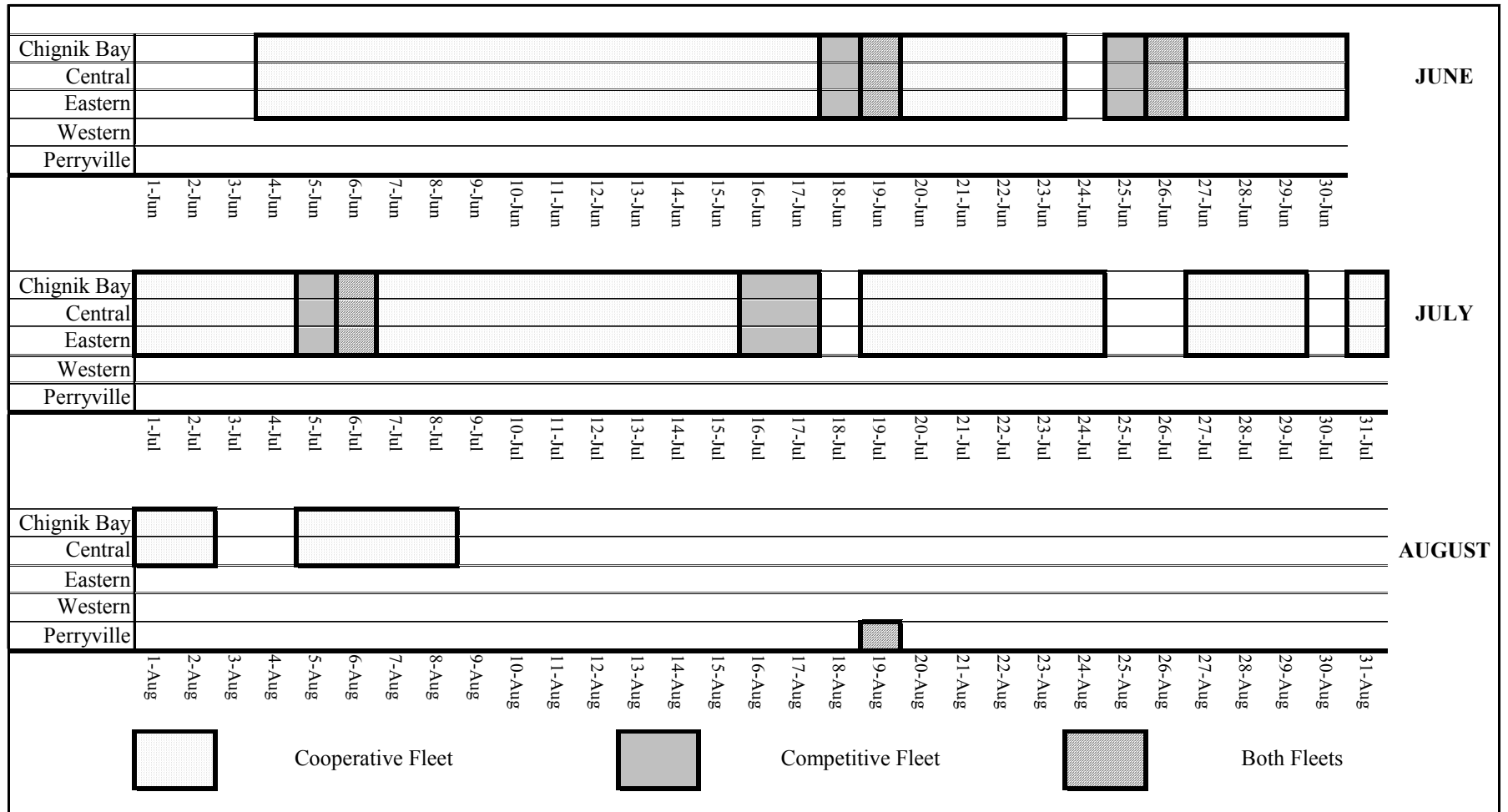


Figure 4.– Representation of days open to commercial salmon fishing, by district and fleet, for June, July, and August, 2004.

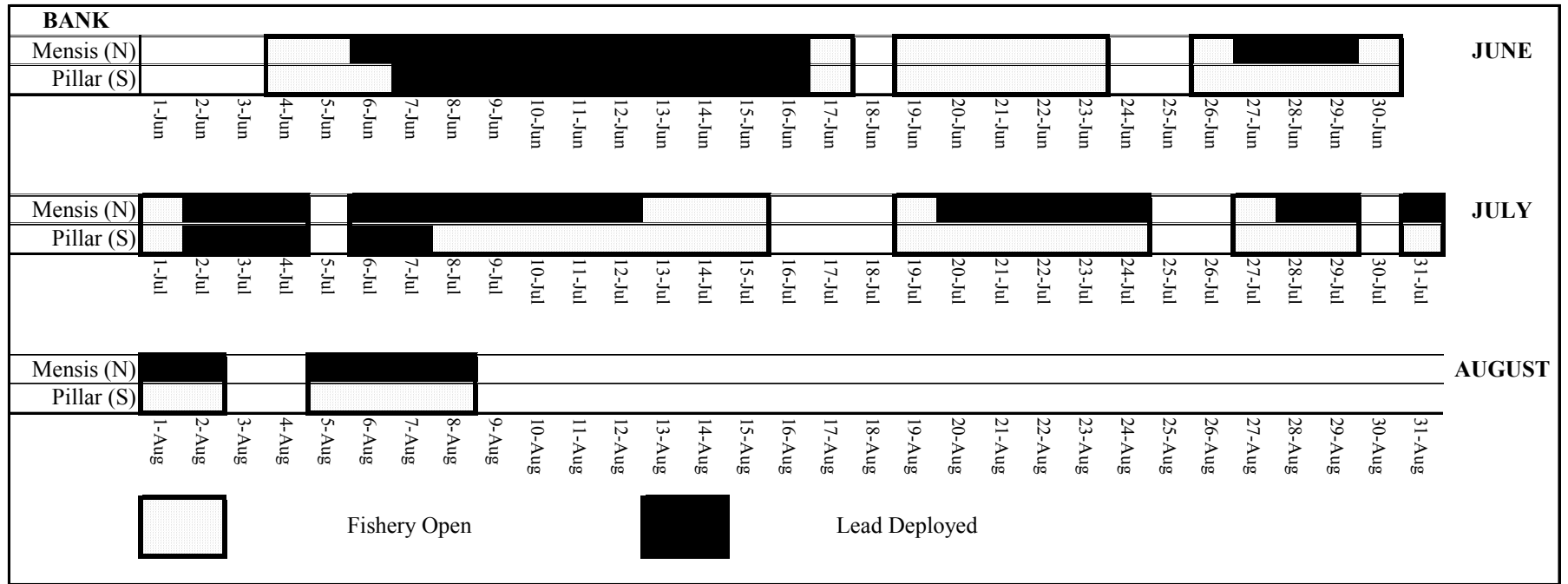


Figure 5.—Representation of fixed-leads use by the cooperative fleet, by day, for June, July, and August, 2004.

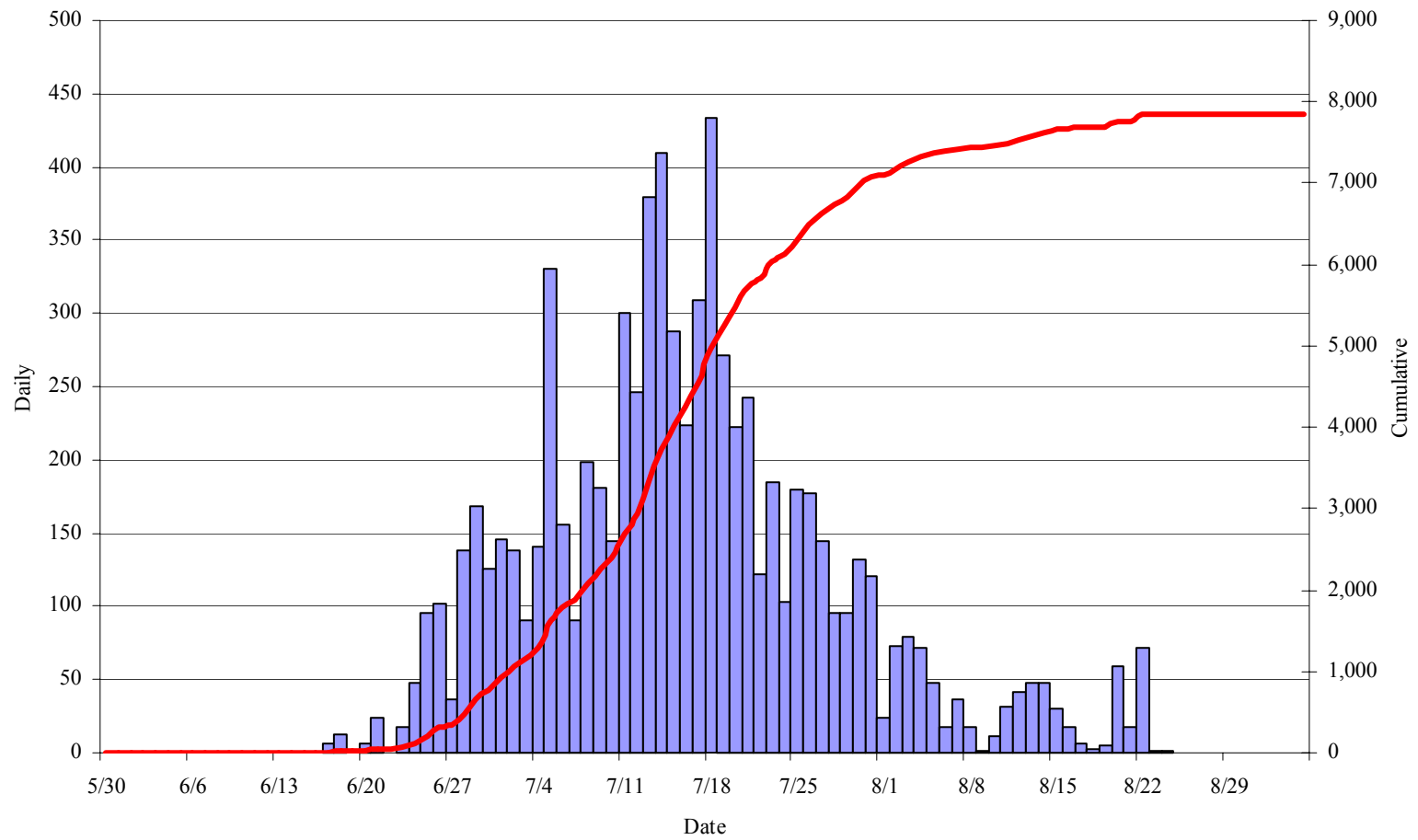


Figure 6.—Chignik River estimated daily and cumulative Chinook salmon escapement, 2004.

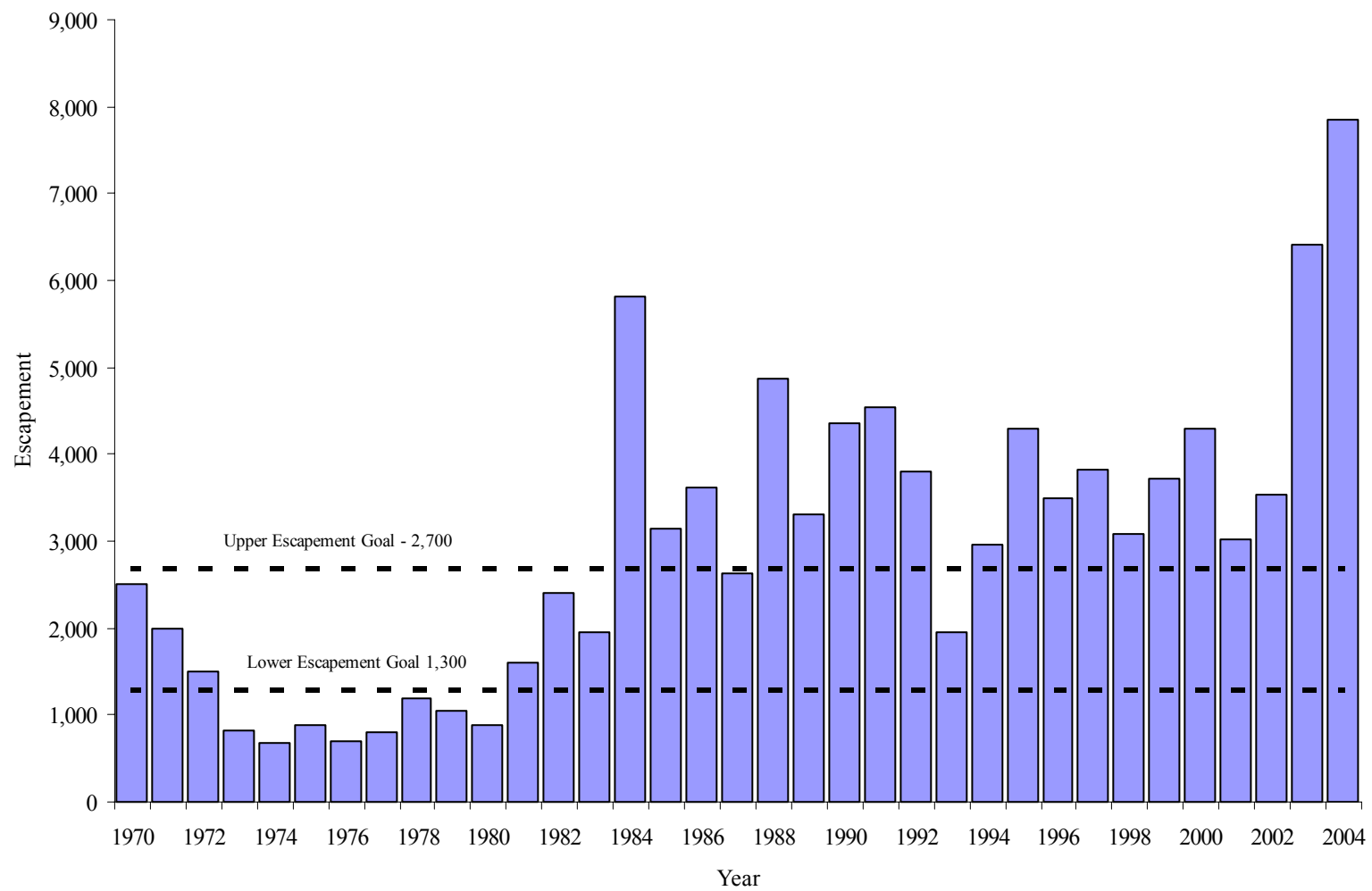


Figure 7.—Chignik River Chinook salmon escapement, by year, 1970 to 2004.

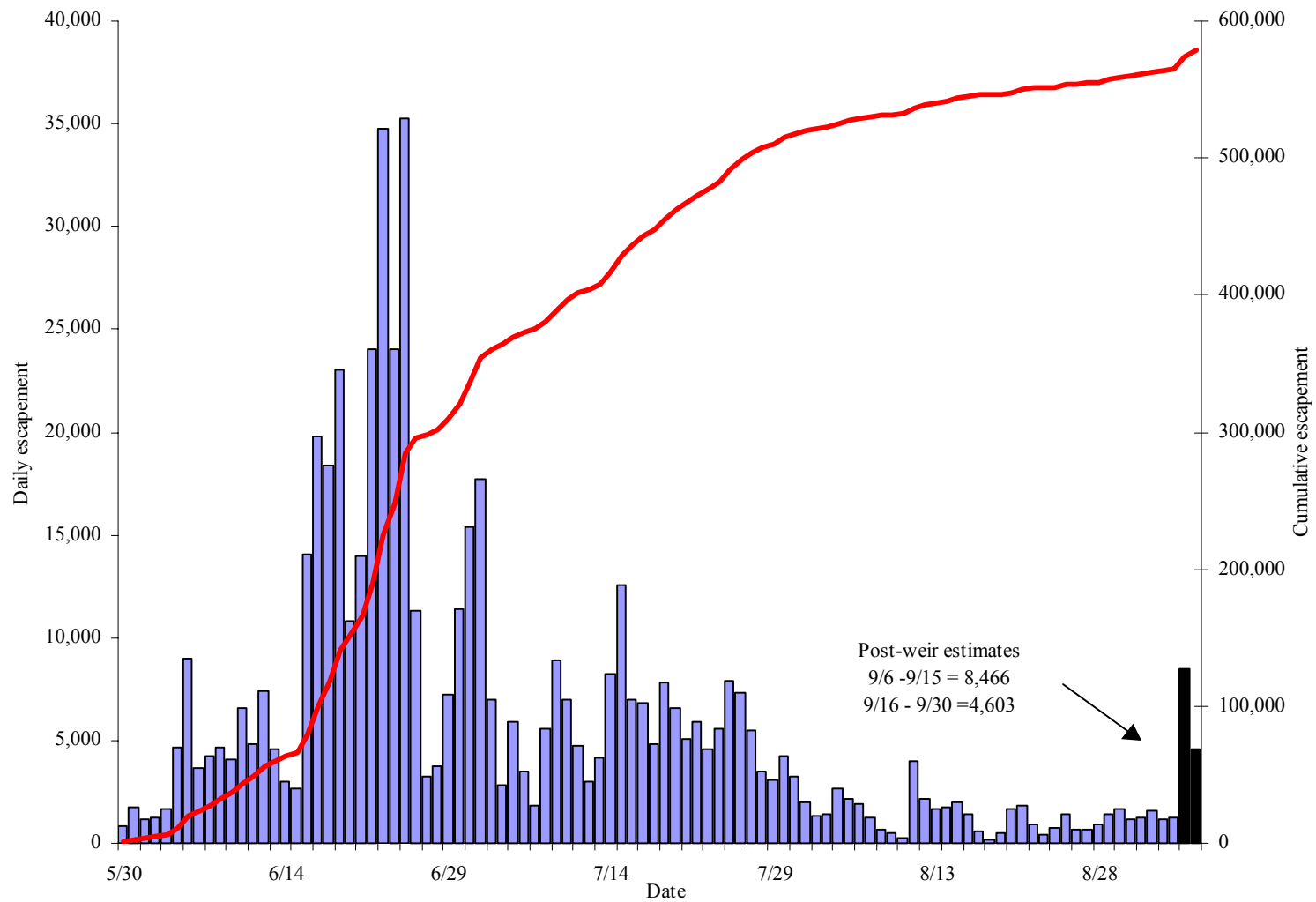


Figure 8.—Chignik River sockeye salmon daily and cumulative escapement, including post-weir estimates, 2004.

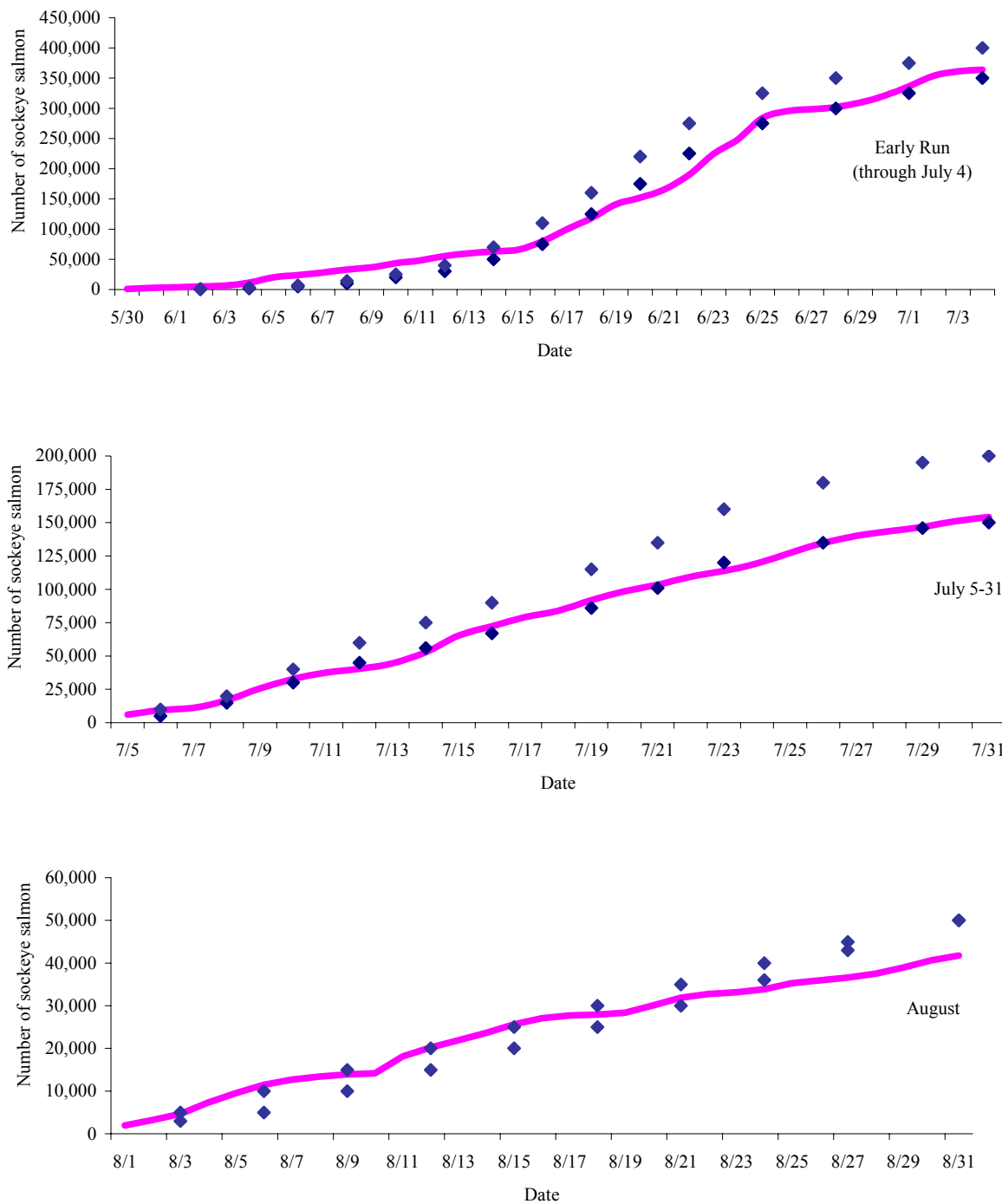


Figure 9.– Cumulative Chignik River sockeye salmon escapement, by day, as compared to interim escapement objectives, 2004.

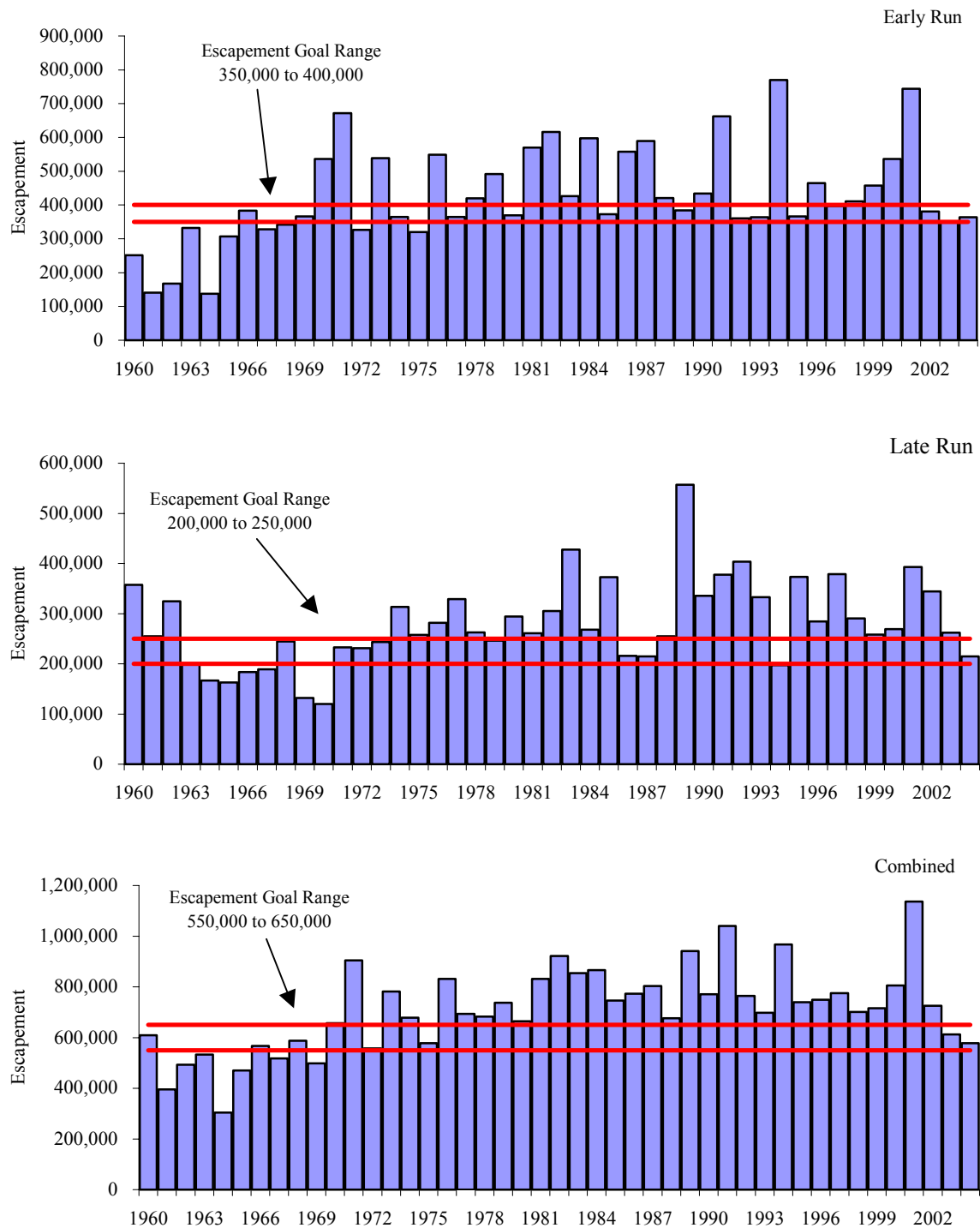


Figure 10.—Chignik River early run, late run, and total season escapements and respective escapement goals, 1960 to 2004.

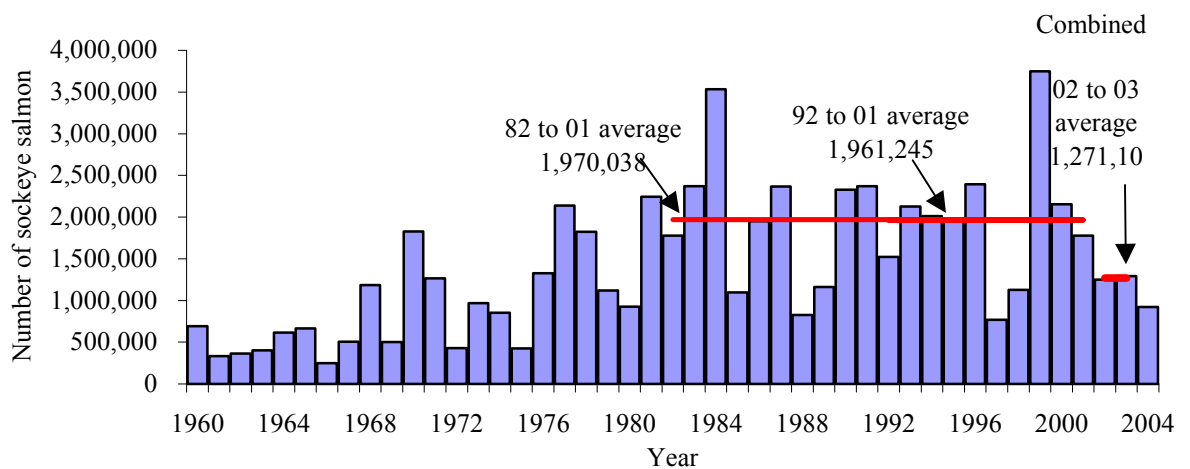
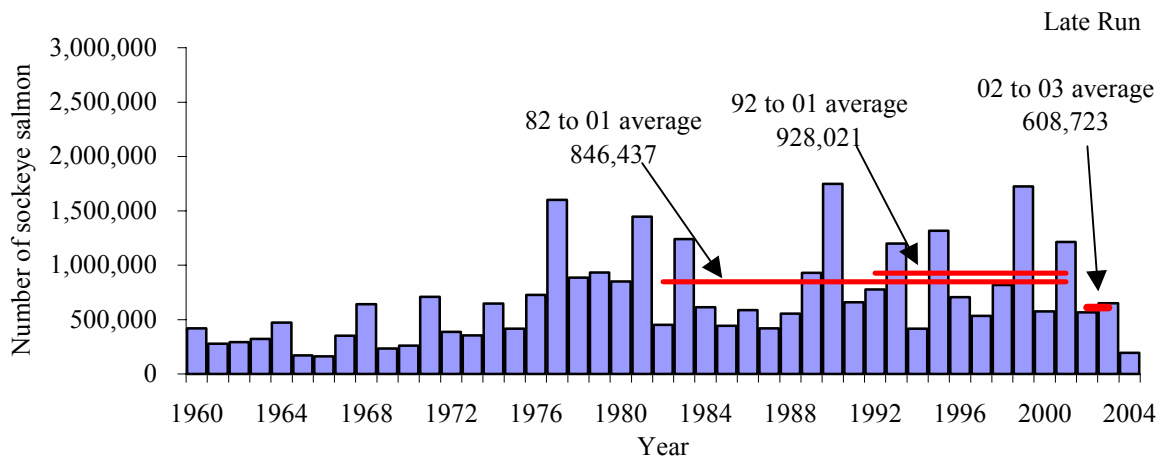
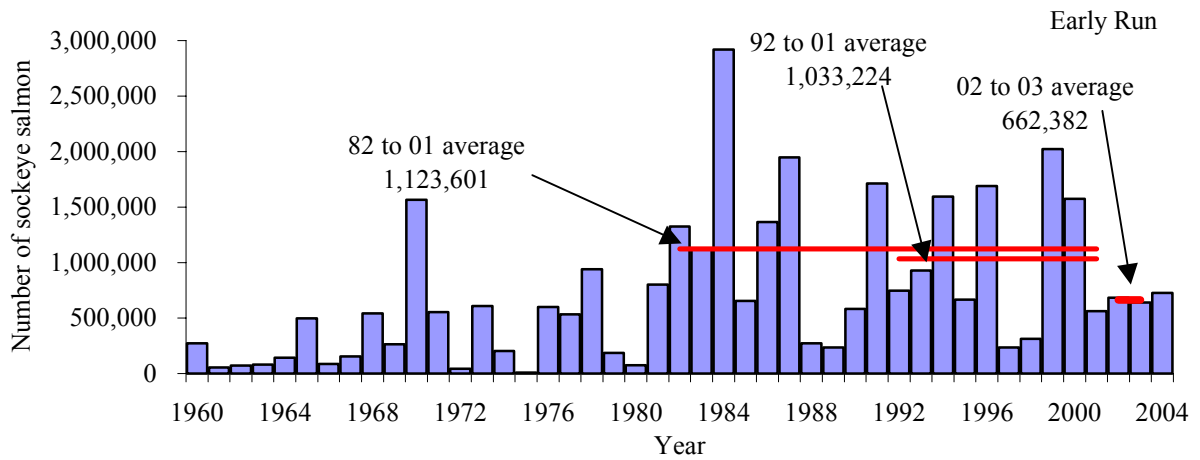


Figure 11.—Chignik Management Area sockeye salmon catch, by year and run, 1960 to 2004.

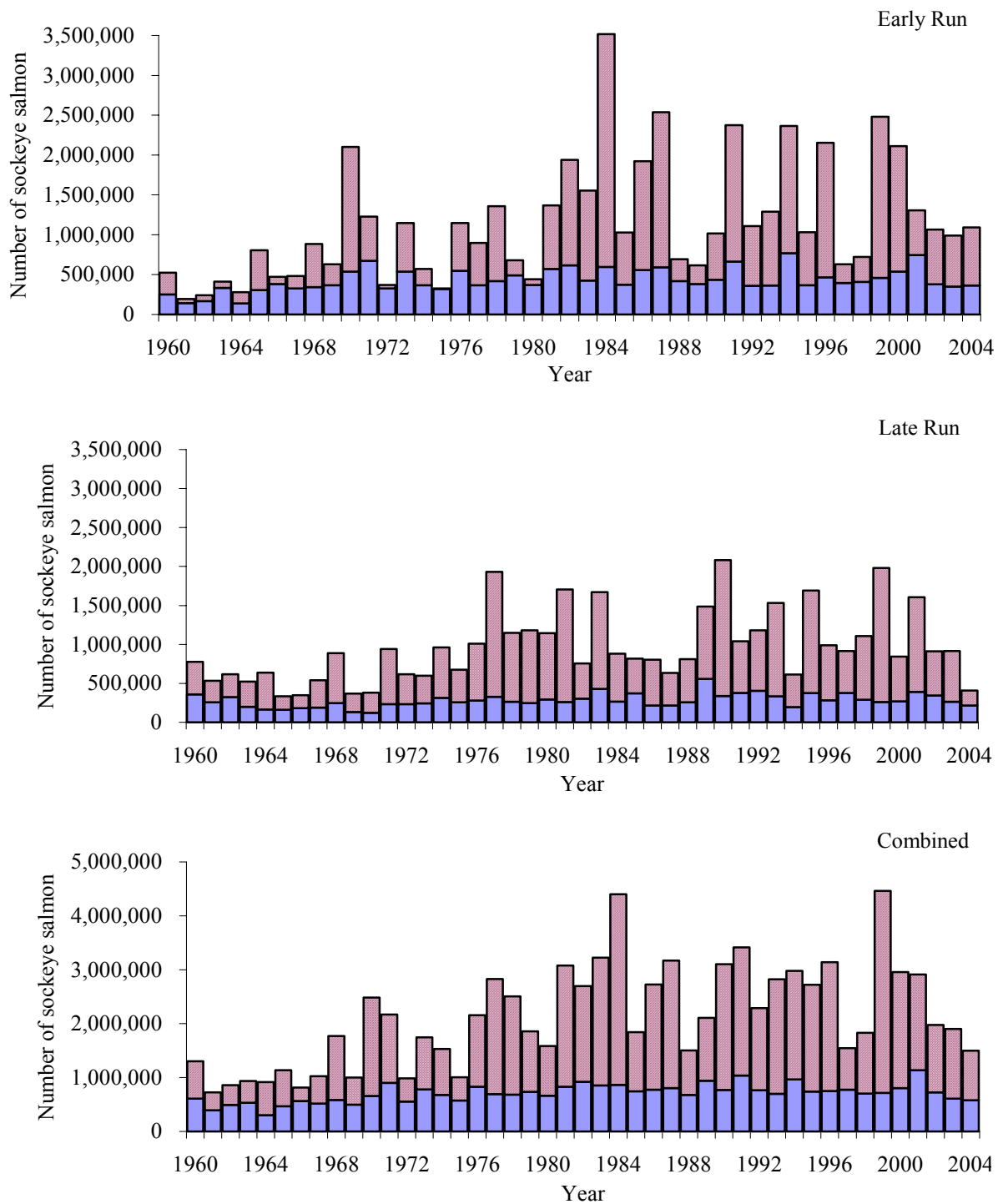


Figure 12.—Chignik Management Area sockeye salmon total run by year and run, 1960 to 2004.

APPENDIX A: CHIGNIK AREA MANAGEMENT PLANS

Appendix A1.-Chignik Salmon Management Plan.

5 AAC 15.357. CHIGNIK SALMON MANAGEMENT PLAN. (a) The department shall manage the commercial salmon fishery in the Chignik Area in accordance with the guidelines set out in the management plan under this section. The goal of this management plan is to allow traditional fisheries in the area to be conducted on Chignik Area salmon stocks, and to achieve the department's biological escapement goals for both Black Lake (early-run) and Chignik Lake (late-run) sockeye salmon and local stocks of pink, chum, coho, and chinook salmon.

- (b) In the Chignik Bay and Central Districts, the commercial salmon fishery shall open concurrently based on escapement objectives for the Chignik Lakes' system sockeye salmon runs, except that
 - (1) the first fishing period shall occur when the following conditions have been met, except in a year when a cooperative fishery permit is issued, as specified in 5 AAC 359(g):
 - (A) a minimum escapement of 40,000 sockeye salmon past the weir at Chignik River by June 12 or until a subsequent interim escapement goal is achieved; and
 - (B) there is a strong buildup of sockeye salmon in Chignik Lagoon, as indicated by the department's test fishing program;
 - (2) during the period of transition from the predominance of the early-run sockeye salmon to that of the late-run sockeye salmon, (usually late June through mid-July), the commissioner shall open and close, by emergency order, the fishing periods to harvest surplus early-run sockeye salmon without jeopardizing the late-run sockeye salmon escapement objectives;
 - (3) from the end of the transition period, described in (2) of this subsection until September 14, the commissioner shall open and close, by emergency order, fishing periods in the Chignik Bay and Central Districts based on the Chignik Lakes' system sockeye salmon escapement goals; the commissioner may take additional emergency order actions to protect or harvest local pink, chum, chinook and coho salmon runs; and
 - (4) beginning September 15, fishing periods in the Chignik Bay and Central Districts may be no more than 48-hours per week, and shall be based on the department's evaluation of the sockeye salmon run strength and the subsistence needs for Chignik Lake late-season sockeye salmon.
 - (c) In the Eastern District,
 - (1) during June, the commercial salmon fishery shall open concurrently with the Chignik Bay and Central Districts, and the openings shall be based on achieving the Black Lake sockeye salmon escapement goals;
 - (2) from approximately June 26 through July 8,
 - (A) the department shall evaluate the strength of the sockeye salmon late run; and
-

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- (B) in order to continue managing the Black Lake sockeye salmon harvest and escapement, while assessing the Chignik Lake sockeye salmon run strength, commercial salmon fishing in the Eastern District will, in the department's discretion, be disallowed or severely restricted;
- (3) from the end of the transition period, described in (b)(2) of this section, until the end of the fishing season, the department shall manage the commercial salmon fishery based on its evaluation of local pink, chum, and coho salmon runs, and the escapement objectives of the Chignik Lakes' system sockeye salmon.
- (d) In the Western and Perryville Districts, the department may open the commercial salmon fishery beginning July 6, except that
 - (1) from approximately late June to mid-July (transition period),
 - (A) the department shall evaluate the strength of the sockeye salmon late run; and
 - (B) in order to allow the department to assess the Chignik Lake run strength, commercial salmon fishing in the Western and Perryville Districts will, in the department's discretion, be disallowed or severely restricted;
 - (2) from the end of the transition period, described in (b)(2) of this section, until approximately August 20, fishing periods shall be based on the department's evaluation of local pink and chum salmon runs, and its evaluation of the Chignik Lake sockeye salmon run from July 22 through July 31,
 - (A) no more than 60,000 coho salmon may be taken in the Western and Perryville Districts, except in those areas designated as terminal harvest areas under (B) of this paragraph;
 - (B) the commissioner may, by emergency order, open fishing in the following terminal harvest areas:
 - (i) those portions of the Western and Perryville Districts north of a line from Cape Ikti at 56° 00.32' N. lat., 158° 32.02' W. long., to Coal Cape at 55° 53.42' N. lat., 159° 00.45' W. long. to Cape Alexander at 55° 47.22' N. lat., 159° 24.57' W. long., and
 - (ii) waters in the Ivanof Bay Section of the Perryville District that are north of the latitude from Alexander Point at 55° 47.37' N. lat., 159° 24.37' W. long., to Kupreanof Peninsula; and
 - (3) from approximately August 20 until the end of the fishing season, fishing periods shall be based on the department's evaluation of local coho salmon runs, and its evaluation of the Chignik Lake sockeye salmon run.

Appendix A2.—Chignik Area Cooperative Purse Seine Salmon Fishery Management Plan.

5 AAC 15.359. CHIGNIK AREA COOPERATIVE PURSE SEINE SALMON FISHERY MANAGEMENT PLAN. (a) The purpose of the management plan under this section is to establish the criteria and management measures for a salmon purse seine cooperative fishery in the Chignik Area.

(b) Chignik Area CFEC salmon purse seine permit holders may receive a permit issued by the commissioner, or the commissioner's designee, to form an annual cooperative fishery only under the following conditions:

- (1) at least 51 CFEC salmon purse seine permit holders must, together, apply to the commissioner for a permit to fish as a cooperative fishery each year;
- (2) an application for an annual cooperative fishery permit must be submitted to the commissioner by March 1; the application must contain the name and CFEC permit number of each applicant; a copy of a cooperative fishery agreement containing the contractual terms upon which the cooperative will be operated must be submitted with the application, including articles of incorporation, corporate by-laws, partnership agreements, or other similar documents that contain the contractual terms of the cooperative;
- (3) a CFEC salmon purse seine permit holder who did not apply by the deadline specified in (2) of this subsection, may elect to participate in the cooperative fishery by registering with the department by March 15; a CFEC salmon purse seine permit holder who does not register by the date specified in this paragraph may not participate in the cooperative fishery;
- (4) the contractual terms of the annual cooperative fishery agreement must
 - (A) provide for participation in the cooperative fishery by registering permit holders who registered after the original deadline, as provided in (3) of this subsection, on the same terms as applicants who did apply by the original deadline;
 - (B) be consistent with state laws that apply to the salmon fishery resources of the state;
- (5) if an annual cooperative fishery permit is approved and issued by the commissioner, or the commissioner's designee, for that year, all permit holders that applied by the original deadline or registered after the original deadline to participate in the cooperative fishery may only participate in that cooperative fishery;
- (6) a CFEC permit holder who participates in the annual cooperative fishery
 - (A) in the Chignik Area may not participate in any other commercial salmon net registration area as either a permit holder or crew member from June 1 through August 31 of that year; and

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- (B) and who holds salmon net gear permits for more than one commercial salmon net registration area listed in 5 AAC 39.120(d), must designate the Chignik Area as the single area for salmon net fishing for that year as specified in 5 AAC 39.115 and 20 AAC 05.1940;
- (7) at least one CFEC purse seine permit holder who is a participant in the cooperative must be on board a purse seine vessel engaged in the taking and delivery of salmon for the cooperative.
- (c) If an annual cooperative fishery permit application meets the qualifications and requirements of this section, the commissioner, or the commissioner's designee, will issue a permit, which may contain registration requirements, reporting requirements, gear requirements, and other requirements or conditions that the commissioner determines necessary for conservation and management purposes.
- (d) For each year that an annual cooperative fishery permit is issued under this section, the Chignik Area cooperative fishery shall be allocated a percentage of the annual Chignik Area commercial sockeye salmon harvestable surplus based on the number of permit holders participating in the cooperative as follows:
 - (1) if participation in the cooperative is less than 80 percent of the registered Chignik Area CFEC purse seine permit holders, the allocation to the annual cooperative fishery will be nine-tenths of one percent of the harvestable surplus for each participant in the cooperative; and
 - (2) if participation in the cooperative is 80 percent but less than 85 percent of the registered Chignik Area CFEC purse seine permit holders, the allocation to the annual cooperative fishery will be ninety five hundredths of one percent of the harvestable surplus for each participant in the cooperative;
 - (3) if participation in the cooperative is 85 percent or more of the registered Chignik Area CFEC purse seine permit holders, the allocation to the annual cooperative fishery will be one prorated share of the harvestable surplus for each participant in the cooperative.
- (e) The commissioner may, by emergency order, open and close separate fishing periods and areas for the cooperative fishery and the open fishery as necessary to achieve the allocation established in (c) of this section. The allocation established under (c) of this section is secondary to escapement and harvest objectives, and the commissioner may, by emergency order, reduce or expand fishing opportunity to ensure escapement and harvest objectives.
- (f) Notwithstanding the provisions of 5 AAC 39.999, at its first meeting in the fall of each year, the board may, consider written requests for regulation changes of the provisions of this section that are sent to the executive director of the board at least 45 days before the meeting. If the board accepts a request, it will schedule the proposed regulation change as necessary to consider the merits of the request.

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(g) In a year when a cooperative fishery permit is issued under this section, the provisions of 5 AAC 15.357(b)(1) do not apply.

(h) In this section,

- (1) "cooperative fishery" means a commercial purse seine salmon fishery in which, by agreement of the participants, the number of fishing vessels may be reduced with the intent of decreasing overhead expenses associated with commercial fishing and controlling the rate of harvest to achieve a higher quality product;
 - (2) "open fishery" means a commercial purse seine fishery conducted by CFEC permit holders who do not participate in the cooperative fishery.
-

APPENDIX B: FIXED LEADS COMMISSIONER'S PERMIT, 2004

Appendix B1.-2004 Fixed Leads Commissioner's Permit.

STATE OF ALASKA

**DEPARTMENT OF FISH AND GAME
DIVISION OF COMMERCIAL
FISHERIES**

FRANK MURKOWSKI, GOVERNOR

211 Mission Road

Kodiak, AK 99615

PHONE: (907) 486-1825

FAX: (907) 486-1841

Or

Chignik Weir

PO 40 Chignik Lake, AK 99548

PHONE: (907) 845-2243

FAX: (907) 845-2235

**2004 CHIGNIK MANAGEMENT AREA COMMISSIONER'S PERMIT
COOPERATIVE SALMON FIXED LEADS**

NAME: Chignik Seafood Producers Alliance (CSPA) ADF&G # 2004-4

OPERATOR: Axel Kopun, President CSPA

ADDRESS: <u>Summer: P.O. Box 30</u>	<u>Winter: PO Box 773173</u>
<u>Chignik Bay, AK 99564</u>	<u>Eagle River, AK 99577</u>
<u>phone: (907) 749-2204</u>	<u>phone: (907) 622-6226</u>

In addition to current Chignik Management Area salmon commercial fishing regulations, participants agree to the following conditions:

- 1) Permit is valid from 8:00 A.M. June 1, to NOON October 1, 2004.
- 2) 5 AAC 15.359 (c) allows, through a commissioner's permit, for CSPA to operate two fixed leads in the Chignik Management Area located in Chignik Lagoon.

-Continued-

- 3) One lead may be attached to the beach at approximately the high tide mark at approximately 56° 16.74' N. lat., 158° 39.01' W. long. A second lead may be attached to the beach at approximately the high tide mark at approximately 56° 16.57' N. lat., 158° 38.84' W. long. These locations are upstream of the regulatory water boundary at Hume Point (5 AAC 15.350 (1)(A)), near the closed waters boundary location known as Pillar Rock.
- 4) Each lead may be up to 125 fathoms in length and no more than 100 meshes in depth.
- 5) Each lead shall be made of seine webbing, with meshes no greater than 4 inches stretch measure.
- 6) Each lead must have a corkline and a leadline and be anchored at both ends and at appropriate intervals along the leadline to hold position in essentially a straight line.
- 7) A distance of at least 100 feet of open space must always be provided for at mid channel between the two leads, except that purse seines, either attached or not attached to the leads, may have less than 100 feet of open space between them and the leads within the Mensis Point to Pillar Rock reach of the Chignik River, provided that access for vessel traffic within the Chignik River is maintained.
- 8) Each lead corkline must have operating white lights at night every ten fathoms along the entire length of the corkline, and have appropriate operating port (red) and starboard (green) lights on the seaward end of the leads to mark the navigable channel between the leads.
- 9) The ADF&G may verbally request the removal of the leads at any time; upon the removal request by ADF&G, the operator must completely remove the leads from the water within two hours.
- 10) Leads shall be completely removed from the water prior to the closure of each cooperative fishing period and may be installed, in the water, at the beginning of each cooperative fishing period.
- 11) One end of a harvesting vessel's seine may be attached to the seaward end of the lead for the purpose of harvesting salmon.
- 12) The aggregate length of the lead and purse seine may not be more than 300 fathoms.
- 13) When a purse seine is attached to a lead, the purse seine vessel, the purse seine, and the lead may at any time go dry, provided that access for vessel traffic within the Chignik River is maintained.
- 14) When a purse seine is attached to a lead, the vessel is not required to keep its engine running and the vessel may be anchored, provided that access for vessel traffic within the Chignik River is maintained.

-Continued-

- 15) At night when a purse seine is attached to a lead, the vessel must display an appropriate red mast light to indicate fishing or a white light to indicate anchoring and there must be at least two white lights placed along the purse seine between the purse seine vessel and the lead.
 - 16) In the Chignik Management Area, a vessel may have a purse seine or hand purse seine aboard as described in 5 AAC 15.332 and a total of two fixed leads aboard as they are described in this permit.
 - 17) When the ADF&G restricts the salmon catch of the cooperative by imposing a daily harvest limit, the cooperative may fully deploy the leads at 12:01 AM of the harvest limit day. When the ADF&G daily harvest limit has been harvest, the cooperative must minimize impediments to fish migrations by tying the lead leadline to the corkline.
 - 18) An ADF&G observer may sample and measure all catch and bycatch of the leads and the harvesting vessel's seine. The vessel operator and crew must exercise patience and slow the pace of fishing, if required, to accommodate the accurate collection of all data required from the ADF&G observer.
 - 19) Participants will notify ADF&G in Chignik prior to commencement of lead operation and at the conclusion of lead operation.
 - 20) The Chignik Seafood Producers Alliance will provide ADF&G a logbook for each lead specifying, on a daily basis, the time each lead is fishing, repairs, alterations, maintenance (cleaning), and other data as requested by ADF&G.
 - 21) Vessels must adhere to all commercial fishing and landing requirements.
 - 22) The Chignik Seafood Processors Alliance is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the goals of this permit and the cooperative fishery management plan, 5 AAC 15.359. The permittee shall notify ADF&G, Division of Commercial Fisheries, and obtain written approval in the form of a permit amendment before beginning any activity that significantly deviates from the approved plan and permits. Any action taken by the permittee or an agent of the permittee that increases the permit overall scope or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved plan. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of ADF&G. Therefore, it is recommended that ADF&G, Division of Commercial Fisheries, be consulted immediately when a deviation from the approved permit is being considered.
 - 23) This permit does not relieve the Chignik Seafood Processors Alliance, their contractors, agents, or other persons who perform their work from the responsibility for securing other permits: state, federal, or local.
 - 24) This permit may be modified or voided by the ADF&G at any time.
-

-Continued-

I _____, for the Board of Directors of the Chignik Seafood Producers Alliance, hereby authorize the release of confidential fish ticket harvest information that results from my participation in the 2004 Chignik Management Area salmon fishery. I understand this information will be used for reporting of stock condition on Chignik Management Area salmon and any effects the lead may have on the salmon stocks and habitat in Chignik Lagoon. I also agree to abide by all permit terms stated above.

CHIGNIK SEAFOOD PRODUCERS ALLIANCE

DATE

ADF&G REPRESENTATIVE

DATE

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME DIVISION OF COMMERCIAL FISHERIES

FRANK MURKOWSKI, GOVERNOR

211 Mission Road

Kodiak, AK 99615

PHONE: (907) 486-1825

FAX: (907) 486-1841

Or

Chignik Weir

PO 40 Chignik Lake, AK 99548

PHONE: (907) 845-2243

FAX: (907) 845-2235

2004 CHIGNIK MANAGEMENT AREA COMMISSIONER'S PERMIT COOPERATIVE SALMON FIXED LEADS AMMENDMENT 1

NAME: Chignik Seafood Producers Alliance (CSPA) ADF&G # 2004-4 Amendment 1

OPERATOR: Axel Kopun, President CSPA

ADDRESS: <u>Summer: P.O. Box 30</u>	<u>Winter: PO Box 773173</u>
<u>Chignik Bay, AK 99564</u>	<u>Eagle River, AK 99577</u>
<u>phone: (907) 749-2204</u>	<u>phone: (907) 622-6226</u>

Article 10 of the 2004 Chignik Management Area COMMISSIONER'S PERMIT- Cooperative Salmon FIXED LEADS is amended to read:

- 10) The leads may be installed in the water at the beginning of each cooperative fishing period. The leadline of each lead shall be raised from the bottom and secured to the corkline in at least five places prior to the closure of each cooperative fishing period.**

-Continued-

I _____, for the Board of Directors of the Chignik Seafood Producers Alliance,
hereby agree to abide by all permit terms stated above.

CHIGNIK SEAFOOD PRODUCERS ALLIANCE

DATE

ADF&G REPRESENTATIVE

DATE

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME DIVISION OF COMMERCIAL FISHERIES

FRANK MURKOWSKI, GOVERNOR

211 Mission Road

Kodiak, AK 99615

PHONE: (907) 486-1825

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Chignik Weir

PO 40 Chignik Lake, AK 99548

PHONE: (907) 845-2243

FAX: (907) 845-2235

2004 CHIGNIK MANAGEMENT AREA COMMISSIONER'S PERMIT COOPERATIVE SALMON FIXED LEADS AMMENDMENT 2

NAME: Chignik Seafood Producers Alliance (CSPA) ADF&G # 2004-4 Amendment 2

OPERATOR: Axel Kopun, President CSPA

ADDRESS: Summer: P.O. Box 30 Winter: PO Box 773173
Chignik Bay, AK 99564 Eagle River, AK 99577
phone: (907) 749-2204 phone: (907) 622-6226

The following articles within the 2004 Chignik Management Area COMMISSIONER'S PERMIT- Cooperative Salmon FIXED LEADS are amended to read:

- 3) **One lead may be attached to the beach at approximately the high tide mark at approximately 56° 16.74' N. lat., 158° 39.01' W. long. A second lead may be attached to the beach at approximately the high tide mark at approximately 56° 16.57' N. lat., 158° 38.84' W. long. These locations are upstream of the regulatory water boundary at Hume Point (5 AAC 15.350 (1)(A)), near the closed waters boundary location known as Pillar Rock. These locations are also upstream of the markers commonly put in place by Emergency Order located at approximately 56°16.90' N.**

-Continued-

lat., 158°38.51' W. long. and approximately 56°16.56' N. lat., 158°38.40' W. long., known as Mensis Point. The area between Mensis Point and Pillar Rock markers shall be known as the “Pillar Rock Harvest Area”.

- 4) (a) The lead attached to the Mensis Point shoreline may be up to 225 fathoms in length and no more than 100 meshes in depth. A purse seine may not be attached to this lead.
(b) **The lead attached to the Pillar Rock shoreline may be up to 125 fathoms in length and may be no more than 100 meshes in depth. A purse seine may be attached to this lead.**
- 6) Each lead must have a corkline and a leadline and may be anchored at appropriate intervals for the purpose of holding its position.
- 7) **A distance of at least 100 feet of open space must always be provided for between the leads in the main channel of the river as measured at the upstream-most corners of the leads. There may be less than 100 feet of open space between the leads and purse seine gear provided that access for vessel traffic is maintained.**
- 11) **Repealed.**
- 13) **When a purse seine or vessel is attached to the Pillar Rock lead or a vessel is attached to the Mensis Point lead, the purse seine vessel, the purse seine, and the lead may at any time go dry, provided that access for vessel traffic within the Chignik River is maintained.**
- 14) **When a purse seine or vessel is attached to a lead, the vessel is not required to keep its engine running and the vessel may be anchored, provided that access for vessel traffic within the Chignik River is maintained.**
- 25) **When the leads are deployed in any manner a cooperative CFEC permit holder must be present at all times within the Pillar Rock Harvest Area.**

I _____, for the Board of Directors of the Chignik Seafood Producers Alliance, hereby agree to abide by all permit terms stated above.

CHIGNIK SEAFOOD PRODUCERS ALLIANCE

DATE

ADF&G REPRESENTATIVE

DATE

APPENDIX C: COOPERATIVE SALMON REQUIREMENTS

STATE OF ALASKA

**DEPARTMENT OF FISH AND GAME
DIVISION OF COMMERCIAL
FISHERIES**

FRANK MURKOWSKI, GOVERNOR

211 Mission Road

Kodiak, AK 99615

PHONE: (907) 486-1825

FAX: (907) 486-1841

Or

Chignik Weir

PO 40 Chignik Lake, AK 99548

PHONE: (907) 845-2243

FAX: (907) 845-2235

**2004 CHIGNIK MANAGEMENT AREA COMMISSIONER'S PERMIT
COOPERATIVE SALMON FISHERY HARVEST REPORTING REQUIREMENTS**

NAME: Chignik Seafood Producers Alliance (CSPA) ADF&G # 2004-2B

OPERATOR: Axel Kopun, President CSPA

ADDRESS: Summer: P.O. Box 30 Winter: PO Box 773173
 Chignik Bay, AK 99564 Eagle River, AK 99577
 phone (907) 749-2204 phone (907) 622-6226

NAME: _____

PROCESSOR: _____

-Continued-

ADDRESS: _____

In addition to current Chignik Management Area salmon commercial fishing regulations, participants agree to the following conditions:

- 1) Permit is valid from 8:00 A.M. June 1, to NOON September 30, 2004.
- 2) Notwithstanding 5 AAC 15.355 Reporting requirements (a) and (b) and AS 16.10.270 Purchase of fish by the pound, tendermen may record multiple sets by a single CFEC permit holder on a single fish ticket (5 AAC 15.359 (c)); one fish ticket per CFEC permit holder harvesting salmon per day per tender per processor.
- 3) The number and pounds of salmon by species by day, and by delivery (set), will be estimated by the tenderman, to the best of the tenderman's ability and entered on the fish ticket (e.g., Fish Ticket Series T). During the first delivery, the tenderman will also record on the fish ticket, the processor code. In the case of a tender delivery to multiple processors, a separate fish ticket will be required that indicates the approximate number and pounds of salmon by species delivered to each processor. Also during the first delivery the CFEC permit holder must sign the fish ticket. The time of delivery and initials of the CFEC permit holder must also be on the fish ticket, adjacent to the estimated number of fish and pounds by species. During any subsequent deliveries by the same CFEC permit holder, the number of fish and pounds by species may be estimated and the CFEC permit holder will initial next to any estimates and provide the time of delivery.
- 4) The number of sets per vessel and the number and pounds of salmon by species by day must be estimated, on-the-grounds; the actual harvest by species by day will be corrected upon processing. The actual values must be provided to the Chignik ADF&G within 3 days of the salmon being caught.
- 5) XXXXX will notify the Chignik ADF&G of their daily commercial salmon purchases and any personal use harvest estimates prior to 10:00 AM. The estimate will include, by statistical area: the number of purse seine vessels making at least one delivery and the name of each tender that delivered the prior day and the name of each tender with salmon aboard (i.e. tied to dock or in-route but not yet offloaded).

-Continued-

- 6) The Chignik Seafoods Producers Alliance (CSPA) will notify Chignik ADF&G if CSPA intends to sale salmon to any processor other than XXXXX. Notification must be received by Chignik ADF&G in a timely enough manner to issue a separate commissioner's permit and obtain required signatures.
- 7) Catcher, tender, and processing vessels must adhere to all other commercial fishing and landing requirements.
- 8) This permit may be modified or voided by the ADF&G at any time.

I _____, for the Board of Directors of the Chignik Seafood Producers Alliance, hereby authorize the release of confidential fish ticket harvest information that results from my participation in the 2004 Chignik Management Area salmon fishery. I understand this information will be used for reporting of stock condition on Chignik Management Area salmon. I also agree to abide by all permit terms stated above.

CHIGNIK SEAFOOD PRODUCERS ALLIANCE

DATE

PROCESSOR

DATE

ADF&G REPRESENTATIVE

DATE

Appendix C2.—Cooperative Salmon Net Pen Requirements.

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME DIVISION OF COMMERCIAL FISHERIES

FRANK MURKOWSKI, GOVERNOR

211 Mission Road

Kodiak, AK 99615

PHONE: (907) 486-1825

FAX: (907) 486-1841

Or

Chignik Weir

PO 40 Chignik Lake, AK 99548

PHONE: (907) 845-2243

FAX: (907) 845-2235

2004 CHIGNIK MANAGEMENT AREA COMMISSIONER'S PERMIT COOPERATIVE SALMON NET PEN REQUIREMENTS

NAME: Chignik Seafood Producers Alliance (CSPA) ADF&G # 2004-6

OPERATOR: Axel Kopun, President

ADDRESS: <u>Summer: P.O. Box 30</u>	<u>Winter: PO Box 773173</u>
<u>Chignik, AK 99564</u>	<u>Eagle River, AK</u>
<u>phone (907) 749-2204</u>	<u>phone (907) 622-6226</u>

In addition to current Chignik Management Area salmon commercial fishing regulations, participants agree to the following conditions:

- 1) Permit is valid from 8:00 A.M. June 1, to NOON October 1, 2004.
- 2) 5 AAC 15.359 (c) allows, through a commissioner's permit, for the Chignik Seafood Producers Alliance (CSPA) to operate net pens to hold live, commercially captured salmon; thus net pens will only be allowed in Chignik Lagoon under provisions of this permit. Fishing and tendering vessels (i.e., vessels that operate under their own power, that have a licensed skipper aboard, and with fish holds that are not directly open to the sea) may contain live fish, for up to three days after their capture, without the need of a commissioner's permit.

-Continued-

- 3) The CSPA will notify the Chignik ADF&G when fish pens are deployed in Chignik Lagoon and when they contain fish, except for fish pens that are attached to the Norquest Seafoods Inc., facilities or a mooring owned by Norquest Seafoods Inc., in Anchorage Bay (56° 18'N.lat., 158° 24'W. long), Chignik as permitted under permit ADF&G # 2004-3. CSPA will provide Chignik ADF&G a daily estimate of the number and pounds of salmon, by species, in each fish pen.
- 4) This permit allows the use of fish pens for holding live salmon for up to three days after being captured in the Chignik District commercial salmon fishery. The net pens may be operated and moored in Chignik Lagoon. Towing pens that contain live salmon caught in the Chignik District, within the Chignik District is allowed.
- 5) A total of up to two fish pens will be allowed within Chignik Lagoon in the Chignik Bay District. Individual fish pens may be up to 40 feet in length, 40 feet in width, and 100 meshes deep. The fish pen mesh size may be no greater than four inches. Lights, decks, fences, and other structural supports may be attached to the fish pens. The fish pens may be attached to each other.
- 6) An ADF&G observer may sample and measure all catch and bycatch contained in the fish pens. The fish pen operator and crew must exercise patience and slow the pace of processing, if required, to accommodate the accurate collection of all data required from the ADF&G observer.
- 7) Catcher, tender, and processing vessels must adhere to all other commercial fishing and landing requirements.
- 8) Fish pens must not interfere with the open fishery as defined in 5 AAC 15.359 (h)(2) or with subsistence fishermen.
- 9) The Chignik Seafood Processors Alliance is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the goals of this permit. The permittee shall notify ADF&G, Division of Commercial Fisheries, and obtain written approval in the form of a permit amendment before beginning any activity that significantly deviates from the approved plan and permits. Any action taken by the permittee or an agent of the permittee that increases the permit overall scope or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved permit. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of ADF&G. Therefore, it is recommended that ADF&G, Division of Commercial Fisheries, be consulted immediately when a deviation from the approved permit is being considered.
- 10) This permit does not relieve the Chignik Seafood Processors Alliance their contractors, agents, or other persons who perform their work from the responsibility for securing other permits: state, federal, or local.
- 11) All fish in a fish pen are considered harvested for all catch reporting and allocative concerns.

-Continued-

12) This permit may be modified or voided by the ADF&G at any time.

I _____, for the Board of Directors of the Chignik Seafood Producers Alliance, hereby authorize the release of confidential fish ticket harvest information that results from my participation in the 2004 Chignik Management Area salmon fishery. I understand this information will be used for reporting of stock condition on Chignik Management Area salmon. I also agree to abide by all permit terms stated above.

CHIGNIK SEAFOOD PRODUCERS ALLIANCE

DATE

ADF&G REPRESENTATIVE

DATE

APPENDIX D: COOPERATIVE SALMON PURSE SEINE SPECIFICATIONS

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME DIVISION OF COMMERCIAL FISHERIES

FRANK MURKOWSKI, GOVERNOR

211 Mission Road

Kodiak, AK 99615

PHONE: (907) 486-1825

FAX: (907) 486-1841

Or

Chignik Weir

PO 40 Chignik Lake, AK 99548

PHONE: (907) 845-2243

FAX: (907) 845-2235

2004 CHIGNIK MANAGEMENT AREA COMMISSIONER'S PERMIT COOPERATIVE SALMON PURSE SEINE SPECIFICATIONS

NAME: Chignik Seafood Producers Alliance (CSPA) ADF&G # 2004-5

OPERATOR: Axel Kopun, President CSPA

ADDRESS: Summer: P.O. Box 30 Winter: PO Box 773173
Chignik Bay, AK 99564 Eagle River, AK 99577
phone: (907) 749-2204 phone: (907) 622-6226

In addition to current Chignik Management Area salmon commercial fishing regulations, participants agree to the following conditions for seine specifications and operations:

- 1) Permit is valid from 8:00 A.M. June 1, 2004 to NOON September 30, 2004.

-Continued-

- 2) 5 AAC 15.359 (c) allows, through a commissioner's permit, for the CSPA to operate purse seines and hand purse seines in the Chignik Bay District: a) east of a line in Chignik Lagoon from 56° 20.528' N. lat., 158° 32.176' W. long. and 56° 19.365' N. lat., 158° 30.851' W. long., seines may not be less than 50 fathoms or more than 225 fathoms in length, and b) west of a line in Chignik Lagoon from 56° 20.528' N. lat., 158° 32.176' W. long. and 56° 19.365' N. lat., 158° 30.851' W. long., seines may not be less than 50 fathoms or more than 125 fathoms in length, except c) in the Mensis Point to Pillar Rock reach of the Chignik River: west of a line from Mensis Point at 56° 16.90' N. lat., 158° 38.51' W. long. to a point on the opposite shore of the Chignik River at 56° 16.56' N. lat., 158° 38.40' W. long. and east of a line from Pillar Rock (north shore) at 56° 16.74' N. lat., 158° 39.01' W. long. and to a point on the opposite shore of the Chignik River (Pillar Rock south shore) at 56° 16.57' N. lat., 158° 38.84' W. long. seines may not be less than 50 fathoms or more than 175 fathoms.
- 3) No seine may be less than three fathoms stretch measure in depth nor more than 375 meshes in depth, including meshes used as chafing gear. The depth shall be determined by using a stretch measure of the web from the cork line to the bottom of the net, including any lines that hang below the lead line.
- 4) Seine mesh may not be more than four and one-half inches stretch measure, except the first 25 meshes above the lead line may not be more than seven inches stretch measure.
- 5) In the Mensis Point to Pillar Rock reach of the Chignik River: west of a line from Mensis Point at 56° 16.90' N. lat., 158° 38.51' W. long. to a point on the opposite shore of the Chignik River at 56° 16.56' N. lat., 158° 38.40' W. long. and east of a line from Pillar Rock (north shore) at 56° 16.74' N. lat., 158° 39.01' W. long. and to a point on the opposite shore of the Chignik River (Pillar Rock south shore) at 56° 16.57' N. lat., 158° 38.84' W. long., the aggregate length of seine (up to 175 fathoms) and lead (up to 125 fathoms) may not be more than 300 fathoms.
- 6) When a purse seine or hand purse seine is in the water for the purpose of taking fish, the seine shall be attached to the licensed vessel operating the gear. Only the licensed vessel and any accompanying skiffs associated with the licensed vessel may be attached to the seine.
- 7) A purse seine and a hand purse seine are considered to have ceased fishing when the bunt end of the seine is attached to the purse seine vessel and the tow end of the seine is attached to the vessel or moving through the power block.
- 8) An ADF&G observer may sample and measure all catch and bycatch from the harvesting vessel's seine. The vessel operator and crew must exercise patience and slow the pace of fishing, if required, to accommodate the accurate collection of all data required from the ADF&G observer.

-Continued-

- 9) Where concurrent cooperative and competitive fishery openings occur in the Chignik Bay District, then seine regulations for all Chignik purse seine permit holders will revert to 5 AAC 15.332 (in the Chignik Bay District, purse seine and hand purse seines may not be less than 100 fathoms or more than 125 fathoms in length) except for the Mensis Point to Pillar Rock reach of the Chignik River where the cooperative fishery seines may not be less than 50 fathoms or more than 175 fathoms.
 - 10) Provisions in item #9, above, will not apply in “Jacks Bay” (all waters of Chignik Bay District east of 158° 15.360 W.long., south of 56°20.00’ N. lat., and west of 158° 10.00 W.long), when “Jacks Bay” is also opened in conjunction with fishery openings in the Western and Perryville Districts.
 - 11) At all times within “Jacks Bay” (all waters of Chignik Bay District east of 158° 15.360 W.long., south of 56°20.00’ N. lat., and west of 158° 10.00 W.long), purse seine and hand purse seines may not be less than 100 fathoms or more than 125 fathoms in length).
 - 12) Vessels must adhere to all commercial fishing and landing requirements.
 - 13) The Chignik Seafood Processors Alliance is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the goals of this permit and the cooperative fishery management plan, 5 AAC 15.359. The permittee shall notify ADF&G, Division of Commercial Fisheries, and obtain written approval in the form of a permit amendment before beginning any activity that significantly deviates from the approved plan and permits. Any action taken by the permittee or an agent of the permittee that increases the permit overall scope or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved plan. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of ADF&G. Therefore, it is recommended that ADF&G, Division of Commercial Fisheries, be consulted immediately when a deviation from the approved permit is being considered.
 - 14) This permit does not relieve the Chignik Seafood Processors Alliance, their contractors, agents, or other persons who perform their work from the responsibility for securing other permits: state, federal, or local.
 - 15) This permit may be modified or voided by the ADF&G at any time.
-

-Continued-

I _____, for the Board of Directors of the Chignik Seafood Producers Alliance, hereby authorize the release of confidential fish ticket harvest information that results from my participation in the 2004 Chignik Management Area salmon fishery. I understand this information will be used for reporting of stock condition on Chignik Management Area salmon and any effects the lead may have on the salmon stocks and habitat in Chignik Lagoon. I also agree to abide by all permit terms stated above.

CHIGNIK SEAFOOD PRODUCERS ALLIANCE

DATE

ADF&G REPRESENTATIVE

DATE

APPENDIX E: CAPE IGVAK SALMON MANAGEMENT PLAN

5 AAC 18.360. CAPE IGVAK SALMON MANAGEMENT PLAN. (a) In years when a harvestable surplus beyond escapement goals for the first (Black Lake) and second (Chignik Lake) runs of Chignik River system sockeye salmon is expected to be less than 600,000, there will be no commercial salmon fishery allowed in the Cape Igvak Section, as described in 5 AAC 18.200(g)(8), until a harvest of 300,000 sockeye salmon in the Chignik Area, as described in 5 AAC 15.100, is achieved. After July 8, after at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if escapement goals are being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area will be at least 600,000 and the harvest in the Cape Igvak Section will approach as near as possible 15 percent of the total Chignik sockeye salmon catch.

(b) In years when a harvestable surplus beyond escapement goals for the first and second runs of Chignik River system sockeye salmon is expected to be more than 600,000, but the first run fails to develop as predicted and it is determined that a total sockeye salmon harvest in the Chignik Area of 600,000 or more may not be achieved, the Cape Igvak Section commercial salmon fishery will be curtailed in order to allow at least a minimum harvest in the Chignik Area of 300,000 sockeye salmon by July 9 if that number of fish are determined to be surplus to the escapement goals of the Chignik River system. After July 8, after at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if escapement goals are being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area will be at least 600,000 and the harvest in the Cape Igvak Section will approach as near as possible 15 percent of the total Chignik sockeye salmon catch.

(c) On years when a harvestable surplus beyond the escapement goals for the first and second runs of Chignik River system sockeye salmon is expected to be more than 600,000 and the department determines the runs are as strong as expected, the department will manage the fishery in such a manner whereby the number of sockeye salmon taken in the Cape Igvak Section will approach as near as possible 15 percent of the total Chignik sockeye salmon catch.

(d) The total Chignik sockeye salmon catch constitutes those sockeye salmon caught within the Chignik Area plus 80 percent of the sockeye salmon caught in the East Stepovak, Southwest Stepovak, Stepovak Flats, Balboa Bay, and Beaver Bay Sections, as described in 5 AAC 09.200(f), plus 90 percent of the sockeye salmon caught in the Cape Igvak Section. The harvest in the Cape Igvak Section at any time before July 25 may be permitted to fluctuate above or below 15 percent of the cumulative Chignik sockeye salmon catch.

(e) This allocation method will be in effect through July 25. The first fishing period of the commercial salmon fishing season in the Cape Igvak Section will not occur before the first fishing period of the commercial salmon fishing season in the Chignik Area.

(f) During the period from approximately June 26 through July 8, the strength of the second run of Chignik River system sockeye salmon cannot be evaluated. In order to prevent overharvest of the second run, commercial salmon fishing in the Cape Igvak Section will, in the department's discretion, be disallowed or severely restricted during this period.

(g) The department shall announce commercial salmon fishing periods by emergency order. The department shall give at least one-day notice prior to the opening of a commercial salmon fishing period unless it is an extension of a fishing period in progress.

APPENDIX F: SOUTHEASTERN DISTRICT MAINLAND SALMON MANAGEMENT PLAN

5 AAC 09.360. SOUTHEASTERN DISTRICT MAINLAND SALMON MANAGEMENT PLAN. (a) This plan pertains to the management of the interception of Chignik River sockeye salmon caught in the Southeastern District Mainland fishery: East Stepovak, Stepovak Flats, Northwest Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections. Before July 11, only set gillnet gear may be used in these sections. For the purpose of this plan, local runs include only those salmon in the waters

(1) beginning July 1, in the Northwest Stepovak Section described in 5 AAC 09.200(f);

(2) in the Stepovak Flats Section described in 5 AAC 09.200(f).

(b) In years when a harvestable surplus for the first (Black Lake) and second (Chignik Lake) runs of Chignik River system sockeye salmon is expected to be less than 600,000, a commercial salmon fishery is not allowed in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and in the Northwest Stepovak Section, excluding Orzinski Bay north of a line from Elephant Point at 55° 41.92' N. lat., 160° 03.20' W. long. to Waterfall Point at 55° 43.18' N. lat., 160° 01.13' W. long., until a harvest of 300,000 sockeye salmon is achieved in the Chignik Area described in 5 AAC 15.100. After July 8, if at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if escapement goals are being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area will be at least 600,000 and the number of sockeye salmon harvested in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and before July 1, in the Northwest Stepovak Section, approaches as near as possible six percent of the total Chignik sockeye salmon harvest.

(c) In years when a harvestable surplus beyond escapement goals for the first and second runs of Chignik River system sockeye salmon is expected to be more than 600,000 but the first run fails to develop as predicted and it is determined that a total sockeye salmon harvest in the Chignik Area of 600,000 or more might not be achieved, the commercial salmon fishery in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and in the Northwest Stepovak Section, excluding Orzinski Bay north of a line from Elephant Point at 55° 41.92' N. lat., 160° 03.20' W. long. to Waterfall Point at 55° 43.18' N. lat., 160° 01.13' W. long., shall be curtailed in order to allow a harvest in the Chignik Area of at least 300,000 sockeye salmon through July 8 if that number of fish are determined to be surplus to the escapement goals of the Chignik River system. After July 8, if at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if escapement goals are being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area is at least 600,000 and the number of sockeye salmon harvested in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and before July 1 in the Northwest Stepovak Section, approaches as near as possible six percent of the total Chignik sockeye salmon harvest.

(d) In years when a harvestable surplus beyond the escapement goals for the first and second runs of Chignik River system sockeye salmon is expected to be more than 600,000 and the department determines that the runs are as strong as expected, the department shall manage the

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fishery so that the number of sockeye salmon taken in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and before July 1 in the Northwest Stepovak Section, approaches as near as possible six percent of the total Chignik sockeye salmon catch.

(e) Beginning July 1, the fishing schedule in the Northwest Stepovak Section, excluding Orzinski Bay north of a line from Elephant Point at 55° 41.92' N. lat., 160° 03.20' W. long. to Waterfall Point at 55° 43.18' N. lat., 160° 01.13' W. long. may not be more than four 24-hour periods with no more than 48-hours continuous fishing during a seven-day period.

(f) The estimate of sockeye salmon destined for the Chignik River has been determined to be 80 percent of the sockeye salmon harvested in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and before July 1 in the Northwest Stepovak Section. Beginning July 1, all sockeye salmon taken in the Northwest Stepovak Section are considered to be destined for Orzinski Bay.

(g) The total Chignik sockeye salmon catch constitutes those sockeye salmon caught within the Chignik Area, plus 80 percent of the sockeye salmon caught in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and before July 1 in the Northwest Stepovak Section, plus 80 percent of the sockeye salmon caught in the Cape Igvak Section of the Kodiak Area. The percentage of Chignik sockeye salmon may be permitted to fluctuate above or below six percent at any time before July 25.

(h) The allocation method described in (a) - (g) of this section is in effect through July 25. The commissioner may not open the first fishing period of the commercial salmon fishing season in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and before July 1 in the Northwest Stepovak Section, before the first fishing period of the commercial salmon fishing season in the Chignik Area. After July 25, the commissioner may open, by emergency order, commercial salmon fishing in the entire Southeastern District Mainland area for local stocks.

(i) During the period from approximately June 26 through July 8, the strength of the second run of the Chignik River system sockeye salmon cannot be evaluated. In order to prevent overharvest of the second run, the department may disallow or severely restrict commercial salmon fishing in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections during this period, and from June 26 through June 30 in the Northwest Stepovak Section.

(j) The commissioner shall open all commercial fishing periods by emergency order. Before commencement of the first commercial salmon fishing period of the season, the department shall give at least 24 hours' notice. For subsequent fishing periods, the department shall give at least 12 hours' notice. If an existing fishing period is extended, the department shall give notice of the extension as soon as possible before the end of the existing fishing period.

**APPENDIX G: CHIGNIK AREA SALMON MANAGEMENT TASK
FORCE MEETING MINUTES**

Chignik Area Salmon Management Task Force (CHASM)

June 2, 2004 Chignik Bay Community Hall, 2:30 PM

Executive Summary

1. Co-Chairman Chuck McCallum called the meeting to order at 2:50 PM
2. Attending the meeting as task force members where:

Co-Chairman Chuck McCallum, Co-Chairman Jim McCullough (ADF&G) substituting for Area Manager Ken Bouwens, Ernie Carlson (Competitive fleet), Jamie Ross (Coop fleet), Axel Kopun (Coop fleet by teleconference), Virginia Aleck (Subsistence fisher by teleconference), Ron Soule (Processors). Also attending were: Kevin Clark (ADF&G), Eric Newland (ADF&G), Denby Lloyd (ADF&G), Jim Long (Trident), Eugene Carlson, Glenn Suydam (Captain G), Andrew Gilbert, Beau Hartmon (Captain G), Clement Shangin (Miss Clementine), Marvin Yagie (Maxine), Bernard Skonberg (Carma Lee), Ernie Carlson (Desperado), Gabe McKilly (Dorthy M), Dean Anderson (Patti Ann), Wallace Hinderer (Raechel Louise), Less Nunn, John Rantz (Equator), Rachael Hinderer (Illusion), Craig Astor (Miss Peggy), Dean Fasnacht (Norquest).

3. CHASM Purpose Statement:

Chuck McCallum read the CHASM purpose statement: "The Chignik Area Salmon Management (CHASM) task force serves as a forum for cooperative fleet, competitive fleet, processors, local subsistence users, and ADF&G to discuss and exchange ideas on potential salmon harvest and management strategies both prior to and during the salmon season. Recommendations and comments through CHASM will be evaluated by ADF&G and implemented when possible, subject to sound fisheries management principles, budget considerations, and BOF regulations and policies." Chuck McCallum encouraged task force members and the public to try to get beyond coop vs. competitive thinking and to consider problems in terms of management needs and solutions to problems. CHASM is a creation of the department and there are times when management action can respond in several ways. Knowing fishermen's opinions on different options is valuable to the department and can be very important to fishermen.

4. CHASM membership:

There have been significant changes in the fishing fleets and in the processor sector that require a change in the CHASM membership. Dean Anderson and Jason Alexander no longer represent the competitive fleet because they are no longer members of the competitive fleet. Ernie Carlson has been the alternate for the competitive fleet and agreed to serve as a CHASM task force member. Ernie Carlson suggested that the second competitive CHASM task force member should be from the lagoon and named John Jones and Laura Stepanof as possible candidates. Unfortunately, neither person was able to attend and attendance by lagoon residents was low, due to poor weather conditions. The meeting was conducted with

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one competitive task force member and comments were taken from other competitive fishers in attendance. Ron Soule and Jim Long agreed that Ron would serve as the single CHASM member for the processing sector.

5. 2004 management update – Jim McCullough ADF&G

5.1. Jim McCullough reported on a department memorandum, “Chignik River In-Season Run Apportionment.” Due to budget cuts, ADF&G will not be utilizing in-season scale pattern analysis (SPA) for separating the two runs this year. Jim explained the new method for managing the two overlapping runs and the adjustments to the interim escapement objectives. The escapement goals have not changed but the dates for achieving interim escapement objectives will change slightly from previous years. The date that the early run is expected to attain the 350,000 – 400,000 goal will be though July 4, instead of June 30 as with pervious interim escapement objectives. The July 4 date was chosen because on that date the number of late run fish counted through the weir before July 4 should equal the number of early run fish that pass through the weir after July 4. The memorandum covered the weaknesses of the SPA method and discussed and the strengths, and weaknesses, of the new method.

5.2. Jim reported on a department report entitled: “Chignik Management Area Commercial Salmon Fishery Management Plan, 2004.” This report covered the 2004 forecast, the use of the longer seines by the cooperative fleet, chum, pink, and coho issues, etc. Jim indicated that zooplankton populations in Black and Chignik Lakes are showing some improvement, although, the populations still need more time to recover. Therefore, the department will again be targeting the lower end of the escapement goals this year.

5.3. Eric Newland (ADF&G) gave a brief update on the 2004 smolt outmigration. There have been no large outmigrations to date but smolt outmigration counts are ahead of last years poor showing. Approximately eight million smolt are estimated to have outmigrated. Normally, the largest outmigrations have already past by this date, although in the past, there may be a large outmigration in the next couple weeks.

6. Additional issues addressed at this CHASM meeting.

6.1. Jim McCullough stated that the department was currently planning on the coop fishing first on June 4. The department was open to alternatives, but there was no consensus for any other management action.

6.2. Jim McCullough suggested that, weather permitting, there would be a test fishery on June 3. The purpose would be to estimate the number of fish in the lagoon and to give the processor an opportunity to tune up their machines.

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- 6.3. Jim McCullough stated that the information he had was that the processors had little interest in outside pink and chum salmon and that there would probably be no Westward and Perryville openings this season because of weak markets. Ron Soule indicated that under the right circumstances that Norquest might be interested in terminal harvest openings in bays targeting ikura grade watermarked chum salmon. Ron indicated that while it was unlikely that they would be interested in bright pink and chum salmon, he didn't want to rule out the possibility. Similar comments were made regarding coho salmon in the out side districts. The department indicated that if a market developed then they would be willing to work with fishers and processors to allow for appropriate fishing periods. The department's concern was avoiding fishing periods where wanton waste may be an issue.
- 6.4. The competitive fishers have a 13% allocation of the sockeye salmon commercial harvest, which is considerably less than last year. Small fleets for both coop and competitive fishermen poses some potential management problems. Some of the issues discussed were:
- 6.4.1. Competitive fishers suggested compressing their season into as short a time period as possible. This would enable them to save on insurance and help attract and keep crews. It was suggested that the department not start the competitive fleet until the run was gaining strength; give them at least 48 hour notice for their initial fishing period; and then allow them to fish until they had attained their approximate allocation for the entire season.
- 6.4.2. Axel Kopun pointed out that the uncertainty of achieving the correct allocation would be too great. Dean Anderson offered a compromise: achieving the competitive fleet allocation by compressing the fishing periods to within one month (e.g. June 15 – July 15). This seemed to be taken as a more feasible alternative. It was envisioned that the cooperative fleet could catch up to their allocation before the end of the season. This might allow for late season opportunities for competitive fishers for those that wanted to take advantage of late season fishing.
- 6.4.3. When it was suggested that over escapement and quality problems could result if the competitive fleet could not keep up during a long opening, considering the limited tender service, then several potential solutions were advanced:
- 6.4.3.1. For example, if fishing became heavy then it might be best if the competitive fleet had short openings (e.g. 12 to 24 hours) with coop openings in between. This should give time for the competitive fleet to handle their fish in a quality manner and deliver a better quality product.

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6.4.3.2. It was also suggested that the coop could deploy the leads at Pillar Rock while the competitive fleet was fishing. Thus the coop could act as a backstop for

6.4.3.3. the competitive fleet. Several problems about having the coop fleet fishing the leads during a competitive fleet fishing period were pointed out.

6.4.3.3.1. The processors indicated that they do not want the two fleets fishing at full strength at the same time because they want to be able to separate the fish in their plant, by fleet, which would be difficult if they were taking fish from both fleets at the same time. When it was pointed out that the two fleets did fish together late last year, Ron Soule responded that that was easy because there were so few fish – “now we are talking about doing it when there are a lot of fish.” Ron Soule also said that if both fleets were needed to stop the fish then there were probably too many fish to process without putting the fleet on limits. Axel Kopun indicated that he believed the competitive fleet could handle the fish for the most part and that, if the coop operated the leads at the same time, a manageable number of fish could be harvested by the coop. The department seemed willing to try and accommodate processor concerns, although the department made it clear that if over escapement became a problem, then having both fleets fishing at the same time in similar or different areas was definitely a management option.

6.4.3.3.2. Another potential problem with both fleets fishing concurrently: Some fishers could be displaced from traditional fishing areas and become disadvantaged in comparison to other competitive fishers who had different fishing patterns. The department said that they wanted to avoid this problem as much as possible while assuring that over escapement was controlled and the allocations achieved.

6.4.4. Chuck McCallum stated that it appeared that the beginnings of a possible alternative harvest strategy for the competitive fleet seemed to be taking form but that it was unlikely that a full blown plan would come out of the meeting. Competitive fishers were encouraged to continue to work with and through their CHASM Task Force members to try to come to a consensus on an alternative approach that still acknowledged the departments need to be subject to “sound fisheries management principles, budget considerations, and BOF regulations and policies.” Jim McCullough agreed that the department would continue to take input throughout the season from CHASM task force members and would look forward to working with them in trying to find a harvest strategy that the competitive fleet preferred.

7. Jim McCullough gave a brief overview of the Board of Fisheries Proposals for the upcoming year.

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8. There were brief discussions concerning the possible commercial fishing periods in the Cape Igvak and Southeastern District Mainland.
 9. The Meeting Adjourned at approximately 5:15 PM.
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**APPENDIX H: SAMPLE 2004 CHIGNIK SUBSISTENCE SALMON
PERMIT**

Appendix H1.—2004 Chignik Salmon Subsitence Permit

2004 CHIGNIK SALMON SUBSISTENCE PERMIT	PERMIT _____ NUMBER <i>SEQ NUMBER _____ (Office Use Only)</i>
NAME: _____	
SUMMER ADDRESS: _____ _____	
WINTER ADDRESS: _____ _____	
LIMIT TO NUMBERS OF SALMON TAKEN: <u>250</u>	
I CERTIFY THAT I HAVE RESIDED IN ALASKA FOR TWELVE (12) CONSECUTIVE MONTHS	
/	
(PERMITEE SIGNATURE)	(DATE)
ISSUED BY: _____	
(ADF&G VENDOR SIGNATURE)	(DATE)

SUBSISTENCE HARVEST LOG FOR 2003							
TRIP DATE	SPECIFIC LOCATION	NUMBER OF SALMON HARVESTED BY SPECIES					
Day/ Month		KINGS	SOCKEYE	COHO	PINK	CHUM	TOTAL

THIS PERMIT IS VALID FROM DATE OF ISSUE TO DECEMBER 31, 2004

PLEASE RETURN THIS PERMIT (WITH YOUR HARVEST RECORD) BY DECEMBER 31, 2004!

**TO:
LISA SCARBROUGH
ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF SUBSISTENCE
333 RASPBERRY ROAD**

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5 AAC 01.450. DESCRIPTION OF CHIGNIK AREA. The Chignik Area includes all waters of Alaska on the south side of the Alaska Peninsula enclosed by 156°20'22" West longitude (the longitude of the southern entrance to Imuya Bay near Kilokak Rocks) and a line extending southeast (135°) from the tip of Kupreanof Point.

5 AAC 01.460. FISHING SEASONS. Fish, other than rainbow trout and steelhead trout, may be taken at any time, except as may be specified by a subsistence fishing permit. Rainbow trout and steelhead trout, taken incidentally in other finfish net fisheries, are lawfully taken and may be retained for subsistence purposes.

5 AAC 01.466. CUSTOMARY AND TRADITIONAL SUBSISTENCE USES OF FISH STOCKS. The Alaska Board of Fisheries finds that salmon and finfish other than salmon, except steelhead and rainbow trout, in the Chignik Area are customarily and traditionally taken or used for subsistence.

5 AAC.01.470. LAWFUL GEAR AND GEAR SPECIFICATIONS. (a) Salmon may be taken by seines and gillnets, or with gear specified on a subsistence fishing permit, except that in Chignik Lake salmon may not be taken with purse seines.

- (b) Fish other than salmon may be taken by gear listed in sec. 10(a) of this chapter, unless restricted under the terms of a subsistence fishing permit.
- (c) Halibut may be taken for subsistence purposes only by a single handheld line with no more than two hooks attached.

5 AAC 01.475. WATERS CLOSED TO SUBSISTENCE FISHING. Salmon may not be taken in the Chignik River, upstream from the department weir site or counting tower, in Black Lake, or any tributary to Black and Chignik Lakes.

⇒ **NOTE: FOR E.O. 4-FS-L-01-04.** In addition to the normal waters that are open to subsistence salmon fishing within the Chignik Management Area, subsistence salmon fishing will also be allowed within the Chignik River upstream of a department marker located 100 yards upstream of the ADF&G Chignik weir to the outlet of Chignik Lake. This will be effective 12:01 AM April 27, 2004 through 11:59 PM June 30, 2004.

5 AAC 01.480. SUBSISTENCE FISHING PERMITS. (a) Salmon, trout and char may only be taken under the authority of a subsistence fishing permit.

- (b) Not more than 250 salmon may be taken for subsistence purposes unless otherwise specified on the subsistence fishing permit.
- (c) A record of subsistence-caught fish must be kept on the reverse side of the permit. The record must be completed immediately upon taking subsistence-caught fish and must be returned to the local representative of the department no later than December 31 of the year issued.

SPECIAL PERMIT PROVISIONS FOR CHIGNIK COMMERCIAL FISHING LICENSE HOLDERS

1. 24 hours before the first commercial salmon fishing opening in the Chignik Area a commercial fishing license holder may not subsistence for salmon.
2. After the first commercial salmon-fishing opening in the Chignik Area, commercial fishing license holders may subsistence fish for salmon in the Chignik Bay District only during times approved by the department at the Chignik weir.
3. Approval to subsistence fish may be granted by registering with the department. The department will require the vessel operators name, address, and phone number, the vessel name, gear used for subsistence fishing, area being fished, date you intend to fish, when you intend to fish, and your subsistence permit number.
4. Commercial fishermen may always remove salmon from their commercial catch for personnel use. Mark the number of salmon taken by species for personnel use on your fish ticket.
5. Competitive commercial license holders may subsistence fish for salmon by registering with the department, during cooperative fishery openings. An additional restriction is that when a competitive fishing period is scheduled, a competitive license holder may not subsistence fish for 24 hours before and 12 hours immediately following a competitive fishing period.
6. Cooperative commercial license holders registered with the department to commercially fish for the coop may subsistence fish for salmon by registering with the department, during competitive fishery openings. An additional restriction is that when a cooperative fishing period is scheduled, a competitive license holder may not subsistence fish for 24 hours before and 12 hours immediately following a cooperative fishing period.
7. Cooperative commercial license holders not registered with the department to commercially fish for the coop may subsistence fish for salmon by registering with the department, during competitive and cooperative openings. These fishermen are limited to set gillnet gear only.
8. These special permit provisions for increased subsistence fishing opportunities will be withdrawn if they interfere with orderly commercial fishing.

APPENDIX I: CHIGNIK SIBLING FORECASTS AND ACTUAL RUNS

Appendix II.—Chignik sibling forecasts and actual runs, by run and year, 1994 to 2004.

Year	Early Run (millions)			Late Run (millions)			Total Run (millions)		
	Forecast	Actual	% Error	Forecast	Actual	% Error	Forecast	Actual	% Error
1994	1.80	2.36	-31	1.30	0.61	53	3.10	2.98	4
1995	1.90	1.03	46	0.90	1.69	-88	2.80	2.72	3
1996	1.40	2.15	-54	1.60	0.99	38	3.00	3.14	-5
1997	1.00	0.63	37	1.60	0.91	43	2.60	1.55	41
1998	0.90	0.72	20	1.10	1.11	-1	2.00	1.83	8
1999	1.05	2.48	-136	1.29	1.98	-54	2.34	4.46	-91
2000	3.90	2.11	46	1.09	0.84	23	4.99	2.96	41
2001	1.00	1.31	-31	0.91	1.61	-77	1.91	2.91	-53
2002	1.03	1.06	-3	1.09	0.91	17	2.12	1.97	7
2003	1.64	0.99	40	1.19	1.00	16	2.83	1.99	30
2004 ^a	1.26	1.08	14	1.08	0.37	66	2.34	1.45	38
5-yr Average	1.8	1.3	13.1	1.1	0.9	8.8	2.8	2.3	12.6
10-yr Average	1.5	1.4	-2.2	1.2	1.1	-1.7	2.7	2.5	1.9